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SUMERS' RESEARCH Bulletin



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and Consumers' Digest

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Rationed Scarcity or Abundant Production?

HEN THE AMERICAN PUBLIC has been told for years that America is a land of plenty, that we had such an overabundant supply of many things, including foodstuffs and factory equipment, that it was necessary to cut down production to prevent a breakdown of our economy, it is a great shock to consumers to see imposed so early in the war the beginnings of a card-system for rationing of any consumers' goods, let alone foodstuffs. The economically informed person may be inclined to ask whether such rationing is a necessary and inevitable technique for distributing scarce goods to consumers, a propaganda technique to condition people to the sacrifice and regimentation that war is likely to bring, or an inefficient bureaucrat's way of distributing scarcity because of his inability to cope with the problem of achieving greater production and wider distribution of the products of mines, farms, and factories.

These are questions that occur to a thoughtful consumer as he faces the problem of adapting his life and activities to rationing of tires, automobiles, gasoline, typewriters, building materials, and sugar, and the promise of future rationing of other items such as meat, clothing, leather goods, and shoes, even railway travelto mention a few which are under constant discussion in the trade and technical press.

Probably because nearly everyone outside the big cities who could afford to buy an automobile had one of reasonably recent vintage, or could purchase one secondhand, no very loud outcry was made on the sudden order to shut down automobile production. The feeble protests of the small automobile dealer, who was a mere businessman and not a "worker," and who had no "pressure group" to fight for him in Congress, were not loud enough to be heard in Washington, D. C.

On tires there was more protest, but still, many people had them or could obtain them secondhand, or could get by for a time with old tires retreaded. Moreover, many a motorist has been heard to say, "Why should I cut down on the use of my tires? American manufacturers will produce something else which will do the job by the time these are worn out." There is, however, a slowly-rising rebellion over the seeming inability of the Washington, D. C., top-men either to obtain new sources of rubber or synthetic rubber, or encourage anyone else to produce it, on a sufficient scale. Recent revelations that our government's highest officials favored the British-Dutch monopoly of crude rubber through actually discouraging, only a year or two ago, the setting up of synthetic rubber plants in this country which would have made us ready for any eventuality, are not calculated to instill confidence in the ability of those in high government positions to plan either efficiently or wisely, or in accordance with their own frequently expressed fears of military involvement of our Nation.

Sugar presents a somewhat different problem. The average pantry stock of sugar does not last long. Furthermore, the aver-

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T IS NO SIMPLE TASK

Luggage

often misled by a bag's good appearance and adroitly worded labeling into thinking it is a first-class article.

Weasel-worded labeling has been outlawed

by the Federal Trade Commission in Trade

Practice Rules for the Luggage and Related

Products Industry, promulgated September

17, 1941, so far as concerns luggage shipped

in interstate commerce. Under these rules,

when an article "is made of or contains so-

called split leather, or leather other than top

This long overdue step toward better lug-

grain," it must be labeled to show it.

to choose luggage suitable both to one's needs and pocketbook. Standing in the center of the luggage department of a big department store, surrounded by all sorts of trunks and bags, the average consumer feels as bewildered as does the automobile driver who is suddenly confronted with too many bright lights. Prices on trunks may run from \$35 or \$40 for the fiber type, to several hundred dollars for the blond beauties covered with fine leather; prices of hand luggage may vary from as little as \$6 or \$7 to as much as \$185 for a bag of fine finish and workmanship. As the qualities which go to make up good luggage are almost entirely hidden from view, the points to be investigated and inquired about are given here, in the hope that they will prove helpful to the consumer who cannot afford to buy high-priced luggage but wants to know what he is getting for the price he can afford.

should be of great value to the average buyer; it follows in the wake of much good though less detailed work in the same general direction by

America.

gage labeling

the Tanners' Council of



Fig. 1-Latels issued by Tanners' Council of America

Coverings Used

Leather has long been used as a covering for luggage and is still the choice of many. Cowhide, which comes in several grades and thicknesses, is most commonly used. During processing, the heavy hides are split into thin sheets, the sheet containing the outer or hair side being the "grain" while the inner sheets are known as "splits." The grain leather is much tougher and more durable than the split, but obviously either could be, and has been, labeled "genuine cowhide," "warranted genuine cowhide," and "genuine leather" by distributors who know how easily many consumers are misled by a partial and incomplete specification of character and quality.

It is possible to identify top-grain leather with the aid of a low-power magnifier (4 or 5x) by the hair-holes which are usually still discernible even after the various finishing processes have taken place. An experienced luggage man can almost always tell by the feel, split leather being harsher to the touch than top grain. Since a split can be finished to simulate top-grain leather very closely, and since few consumers have gotten into the habit of carrying magnifiers on their shopping trips, the average person is too

This Council has licensed many of the reliable luggage firms to use its *Top Grain* labels on their products. The small (about 2 inches long) bronze labels showing manufacturer's license number, kind of leather, and Tanners' Council seal, may often be found pasted inside bags somewhere near the hinge. The Council's smaller black and gilt tags, denoting split leather, are occasionally found (see Figure 1). Luggage from a reliable manufacturer will carry a label stamped into the leather itself on the bottom of the bag designating the kind of leather. Such a label is sometimes hard to read as the stamp does not always penetrate deeply enough into the leather to produce a clear impression.

Besides cowhide, other leathers are often used in luggage; these include pigskin or boarhide, seal, alligator, ostrich, walrus, shark, and buffalo. Some of them are much more expensive than cowhide. Cowhide can be finished by a process known as embossing, by which it is made to resemble the more expensive leathers very closely. When this is done, even though the product may be of high-grade leather, it should properly be labeled and sold only for what it is, e.g., "Top-Grain Cowhide Imitation Ostrich Grain" or "Split Cowhide Embossed to Imitate Walrus," etc. The new Trade Practice Rules already mentioned give detailed directions for labeling luggage made of embossed leather so that the consumer will have all the facts. Walrus leather is so scarred and rough when received that it is nearly always embossed in order to hide its imperfections.

The use of aniline dyes is frequently a mark of good leather goods because of the fact that only the best grades of leather, practically free of blemishes, are dyed with aniline dyes. This is on account of the transparency of the dye, which does not hide even such defects as small scars and natural imperfections of the leather. Aniline-dyed leather is usually sold in smooth finishes.

There are several grades of top-grain leath-The second and third grades will wear about as well as first grade, but are marred somewhat so that it is impracticable to use them with a smooth finish or with aniline dyes. When leather with such imperfections is used, it is commonly dyed and is almost always embossed with a surface pattern to hide the imperfections and give the leather a pleasing appearance. There is no objection to this since it is eminently desirable in all respects that the lower-grade leather should be put to advantageous use. The only objection the consumer may reasonably have in respect to leather goods is when one type is given the appearance of another for the purpose of deception. All split leather is embossed necessarily as it has no surface grain or texture, any more than has pasteboard, and needs some graining, therefore, to give it satisfactory appearance.

Rawhide, which has recently become popular, is the toughest and longest wearing of the leathers commonly available for luggage. It is not suitable for bags which are required to be flexible, but gives excellent service on trunks and the stiff types of bags, to which it is well suited. Walrus, elkhide, and topgrain cowhide (any type) are about equal in wearing qualities and are second to rawhide. Cowhide which has had a thin cut of the grain portion removed to eliminate surface inequalities, is known as deep-buff cowhide;

this is second to top-grain cowhide in wearing quality.

During the past several years, fabric coverings for luggage have become very popular. Fabric-covered luggage is usually somewhat lighter than the leather-covered type, and some astute person in the trade thought of calling it "airplane luggage," which diverts the consumer's attention from the absence of a leather covering. If the covering is of sturdy duck or canvas properly finished to shed dirt and moisture, the luggage should give reasonably long and satisfactory wear. The coating material usually used on the fabric of fabric-covered luggage is pyroxylin, a soluble guncotton product or collodion. Inferior coating materials and inferior thin fabrics are used with the lower-grade "airplane luggage," and this will have very much poorer wear-resisting properties than heavy fabrics with better-grade coating.

Fiber is a material more characteristic of trunks than of suitcases, and this covering will be discussed more fully subsequently.

Linings

The lining of luggage is another important item. Linen or some other closely woven strong fabric gives the most wear. Goodquality rayon will give satisfactory service and is used even in expensive cases.

Soft, pliable leather makes a long-wearing lining and is very satisfactory when in good condition. As it must be very thin in order to be fitted nicely, it is likely to dry out rather quickly, and finally to scale off and rub off on the clothes. Leather is also appreciably heavier than other lining materials and so adds noticeably to the weight of a bag. Imitation leathers used as linings in bags of poorer grade are undesirable.

Hardware

It is quite often possible to judge the quality of luggage by its hardware, good hardware usually being an indication of good luggage. Cheap locks and latches which fly open disconcertingly when suddenly jarred, and otherwise skimped or unsatisfactory hardware are found only on poor bags.

The shortage of brass, due to war conditions, may force the use of steel fittings. If they are given a properly oxidized finish and are well lacquered, such fittings will last a long time without rusting. However, it has

long been considered a necessity for luggage sold for use in the tropics to be equipped with solid brass hardware. No doubt some improvement in rustproofing practices for steel hardware and fittings will be worked out, as necessary saving in use of non-ferrous fittings requires researchers to put their minds to the problem.

Care and Storage

The care given luggage will add greatly to its satisfactory life. It should not be stored in an exceedingly dry or hot place like the attic in summer, nor in a damp place like an outbuilding or the cellar. Either excessive heat or excessive moisture will cause rapid deterioration. Pieces which are very seldom used should be wrapped in paper to protect them from light and air, and so prolong their life.

Luggage should not be allowed to get dirty. Don't wait until it gets badly soiled to start cleaning it. For fabric luggage with a water-proof finish, only a little neutral soap and water is required to remove ordinary soil. On leather luggage, a well-known or reputable make of saddle soap may be used.

Trunks

A satisfactory trunk must be able to withstand hard knocks, severe falls, the scraping wear of being dragged along station platforms over nails or imbedded bits of iron in planks, etc. No one who expects to use a trunk with reasonable frequency should buy any but a good grade, for a poorly made trunk will break or warp and become practically useless under hard service conditions. Anyone who has seen trunks handled into and out of the hold of a steamer will know why a poor or weak trunk is a hazardous investment in any case where the contents are of significant value.

For maximum strength and resistance to actual breakage, the trunk body should be of plywood, preferably fir, since this wood is particularly resistant to shock and impact. This type of body is used in the most expensive trunks, as well as in the more moderate-priced **good** ones. Poorer quality trunks have lightweight solid wood bodies; the "low-end" manufacturers may even use for trunk building a grade of wood suitable only for packing crates. The plywood body is not only resistant to unusual strains but also

to warping, which becomes a real problem wherever storage conditions are far from the ideal. The prospective purchaser should inquire in specific terms regarding the kind of body used. If the manufacturer and dealer are reliable ones, this sort of data will always be available. If the salesman doesn't know or won't tell, don't buy your trunk in that store. If he had good construction to sell, he would be quick enough to tell you about it.

The most beautiful trunk coverings are probably the luxurious leather ones, though it is hard to choose, so far as appearance goes, between leather and some of the very heavy specially finished fabric coverings. If price is no object the purchaser of one of these fine trunks will undoubtedly receive much personal satisfaction and long wear as well, from his purchase. However, if you are a harassed parent getting a child ready for college on a limited budget, for example, and want a good strong trunk at moderate cost, then one with a hard vulcanized fiber cover and heavy vulcanized fiber bindings should prove satisfactory as to wearing qualities, and it will be much cheaper. Indeed, so far as durability is concerned, hard or hard-vulcanized fiber (the two terms are synonymous) is superior to fabric, leather, and, of course, to another type of fiber known as soft fiber. About the only trunk covering which will wear better than hard-vulcanized fiber is the toughest rawhide.

Be sure, however, that the fiber used in the trunk purchased is hard-vulcanized fiber. not just fiber, which is invariably soft fiber. This can only be ascertained by asking the salesperson. To the average buyer the two are identical in appearance but the hardvulcanized fiber will long outlast the soft fiber, which is in reality only a heavy tough paper, whereas the hard-vulcanized fiber is a true vulcanized product finished with heat and high pressure. Bindings even on expensive leather trunks are of heavyweight hard fiber, as this has proved more satisfactory than metal. Extra bandings of the same material for added strength are a necessity, and the observant buyer will note that the binding strips on some trunks are much wider than on others. The extra reinforcements and wider bindings will usually be found well worth a few extra dollars.

The metal fittings of a trunk are of great importance. Hinges should be of cold-rolled

steel, plated with brass; anyone with mechanical sense can usually tell whether such hinges and fittings are really strong or just made to look so. Such fittings have to take great punishment during the life of a trunk and are subjected to enormous strains, as anyone can tell by examining a trunk which has seen hard use. The hinges and fittings of wardrobe trunks are particularly subject to such strains.

A smooth finish and good polish on all exposed metal parts are valuable because smoothly polished surfaces better resist rusting. All metal fittings should be **riveted on**. Locks made of brass castings are more satisfactory than locks made of light stampings, for the latter easily become bent, and then cause continual trouble in closing.

Some trunks are equipped with rather elaborate locking devices; while these add considerably to the price, they are not very important from the standpoint of usefulness. Drawers in a wardrobe trunk should be of wood reinforced to prevent warping and covered with some long-wearing textile fabric. Avoid trunks having drawers with cardboard bottoms; these have very short service lives and should never be found in anything but the very cheapest trunks. An interlock device which holds all the drawers in place with one rod and lock is another very desirable asset.

Be sure the hangers in a wardrobe trunk are smooth, for whether or not they are covered with fabric, rough hangers may cause damage to clothing.

It should be possible to purchase a well-made, satisfactorily durable wardrobe trunk at retail for approximately \$35 to \$40.

Hand Luggage with Box Foundation

In luggage of this rigid type, the construction and material of the box itself are very important. In the better bags, tops and bottoms of the box are usually of 3-ply basswood with ends and sides of solid wood dovetailed together at the corners. Since fir has superior shock resistance, it is probable that fir plywood will eventually be used instead of basswood. Use of fir, however, will make a bag somewhat heavier. According to one authority, an older type of box construction, using tarboard for top, bottom and sides, with a steel frame to lend strength to the assembled case, is no longer regarded as a

satisfactory construction. Cardboard of any type or weight is unsatisfactory for use in making bodies of hand luggage expected to give long wear. However, cheap cardboard cases may prove useful to the child who has to carry a few light articles (i.e., slippers for a dancing class or material for club meetings, etc.) to school, for transporting the family bathing suits to and from the shore, or for occasional uses where one would hesitate to take a good, more expensive bag. Cardboard is used, of course, when low production cost is the primary consideration.

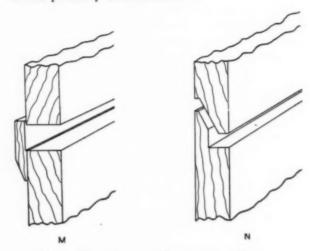


Fig. 2—Two Types of Closings for "Box Foundation" Luggage

In Type M, a shoulder or rabbet is formed by an added piece of material at the left.

On Type N, a bevel is provided to form the rabbet and assist in keeping out dust. Type M, with the shoulder added, is likely to be the stronger of the two.

Two types of box closings are most commonly found and there are differences of opinion as to which is preferable. In the first type the edge of the box top is beveled to fit down over a similarly shaped bevel or rabbet to form a lapped joint (see Fig. 2 at N). In the second type the rabbet is formed by a strip of wood 1/16 in. thick, which helps strengthen the box (see Fig. 2 at M). In some airplane luggage, a modification of the second type is found in which a shoulder is built around the closing edge of the bottom section of the suitcase, using strips of 5-ply This makes a very strong edge which supports the top well and adds real strength to the luggage. Still another type of closure noted on some special-purpose luggage was a so-called dustproof edge. This

consisted of a molded metal tongue-andgroove construction; it would seem to be a desirable construction for use on bags for general use.

The type of glue used in the plywood is important but out of the question perhaps for the consumer to identify. Animal glues are widely used and give satisfactory results if properly applied. Vegetable glue has such poor holding strength that it is unsatisfactory for luggage. Casein glue, which holds well, dulls the wood-working tools so seriously that it adds considerably to the cost of making cases. This is also true of the waterproof plastic or synthetic resin glue used on the lightest weight airplane luggage and is one of the reasons for the high price of the bettergrade luggage of that type.

Coverings of bags may be of leather, canvas, or some other fabric, or one of the numerous imitation leathers. For longest wear under hard usage a bag of top-grain leather probably should be chosen. However, leather luggage is expensive and will be scarcer in future. It is also somewhat heavier than fabric-covered luggage. For many buyers, these are two real drawbacks which have added to the popularity of the lightweight airplane luggage.

When airplane luggage is bought, be sure the covering is one of the satisfactory fabric types already mentioned under coverings. Bags covered with imitation leather are often attractive in appearance and may sell at about half the price of real leather luggage. Since imitation leather is in reality a cotton fabric with a special finish, there is little difference in wearing quality between good imitation leather and fabric-covered airplane luggage; the imitation leather will be likely to crack and become shabby-looking before the airplane luggage does, however. Imitation leather will not, of course, give the length of service which can be expected from highgrade top-grain leather; nevertheless, a highgrade imitation leather may very possibly outwear poor-quality split leather.

The coverings of rigid-type luggage are usually glued to the cases with glue which is not waterproof. The new waterproof resin glue is ordinarily used cold and does not work well in the gluing machines which are designed for hot glue. Although the non-waterproof glue is said to cause little trouble, as a rule, there have been instances reported

of bag covers which have come loose when exposed to wet weather.

Hand Luggage Without a Hard-Box Foundation

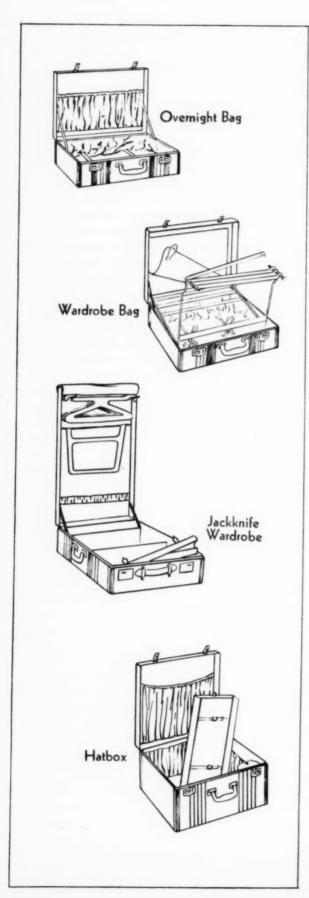
Hand luggage (gladstones, club bags, duffle bags, etc.) which does not have a hardbox foundation, depends for wearing quality much more upon the quality of materials (and workmanship) than does hard-box luggage. Covers are always of leather or imitation leather; the consumer should read the labels carefully, and with strict attention to detail.

In a large flexible bag like a gladstone, the leather should weigh not less than 5 to 6 ounces to the square foot; the backing material should be flexible chip board (a kind of pulp board used for making paper boxes) and burlap. Such bags usually have a metal foundation frame. Club bags should always have two handles (which come together as grasped in the hand) for proper balance in carrying.

Hand Luggage, General

Hand luggage comes in many styles and types, and it is for the individual to decide which seems best to suit his needs. However, some general advice may be helpful.

The woman who can afford more than one bag, will probably want an overnight case for use on week-end trips or visits, and a wardrobe case for longer vacation trips. The wardrobe case seems at present to be the most practical style for general use. hanger equipment makes it possible to carry several dresses, skirts, and blouses in good condition. It has ample room for underwear, shoes, stockings, gloves, etc., and is much less awkward to handle than the so-called "jackknife" or "week-ender." Both the wardrobe and week-ender types of bags are heavy when loaded due to the large amount of clothing which may be carried; therefore, convenience in handling should be accorded weight. However, for one who travels or vacations for any extended length of time without a trunk, a jackknife would make a good additional bag. A hatbox might also be given consideration for this purpose. Many kinds of clothing do not pack or carry well in a hatbox, but it will hold a large number of other items that are difficult to pack in the bags containing the regular supply of cloth-



ing. A Pullman case would also prove a convenient extra bag.

For a man, a club bag is a useful piece of luggage. It will not, of course, carry a suit properly but will do nicely for an overnight visit when an extra suit is not a necessity. Zipper duffle bags are much like club bags but have no gussets at the ends to waste inside space. This type of bag does have one disadvantage in that it is hard to pack due to the relatively small opening. As most men like to carry an extra suit even for short visits, it is probable that the two-suit bag (Tusuiter, Tray-suiter, etc.) would prove the most practical. This is a fairly compact bag somewhat on the order of a woman's wardrobe case. It will carry two suits with one fold, and has compartments for ties, shoes, shirts, etc. A man's "fortnighter" or "jackknife bag" will carry more clothing than the two-suit bag, but is so heavy when loaded and so awkward to handle that preference is usually given the two-suit type. The fortnighter will carry two heavy suits and one lightweight one and has ample space for other clothing. It is reported that both kinds of bags do a fairly satisfactory job of keeping suits in good condition. The "jackknife" bag is a good auxiliary piece of luggage for long vacations, and the two-suit type is considered best for regular use; but to a degree, of course, this is a matter of personal choice and experience with one's own clothing and traveling problems. Gladstones and other flexible bags hold a great deal but do not carry suits as well as the types of bags that are built with hanger equipment. Gladstones and flexible bags make good extra bags, however.

Buying Luggage

Unless you are one of those very astute consumers who never or only very seldom get gypped when hunting for bargains, you will do well to buy luggage in a reputable store, for the luggage trade is full of trick selling devices and shrewd salesmen who can think of more ways to cheat the consumer than the average consumer can learn to guard against. Cut-rate luggage shops abound and the very careful buyer can only purchase to advantage in them provided he knows something about luggage and is aware of the common devices for cheapening construction and materials. All other consum-

ers will do well to stay away from the bargain luggage shop. A common trick of the trade is to have some fine-looking bags in the window labeled, perhaps, "\$28 bags now \$13.50." The number of the good bags is, of course, carefully limited, and the one in the window will not be taken out "because that would disarrange the window display" and, besides, the salesman who sells more than one or two a day of the loss-leader or bait item will soon be looking for another selling job. which look very alluring and fine in design and finish in department-store and specialtystore advertisements seem to be patently inferior imitations of good luggage, when closely examined by observing consumers. Places where you can get luggage "wholesale" are often about as unreliable as the cut-rate stores. The list prices advertised are usually fictitious, and "wholesale" discounts of 25 to 40% mean little when the so-called list prices quoted are far above the regular prices for the type of luggage displayed. The Federal Trade Commission has cited several firms for this deceptive "wholesaling" practice, which has been proscribed by the new trade practice rules for the industry. These are supposed to be binding upon all luggage firms that trade in interstate commerce, that is across state lines, or in the District of Columbia. A legitimate special sale in a store of good reputation is another matter entirely; just be sure you are looking at a regular line of high-grade merchandise marked down, not a lot of low-grade goods or trashy merchandise bought specially for the sale.

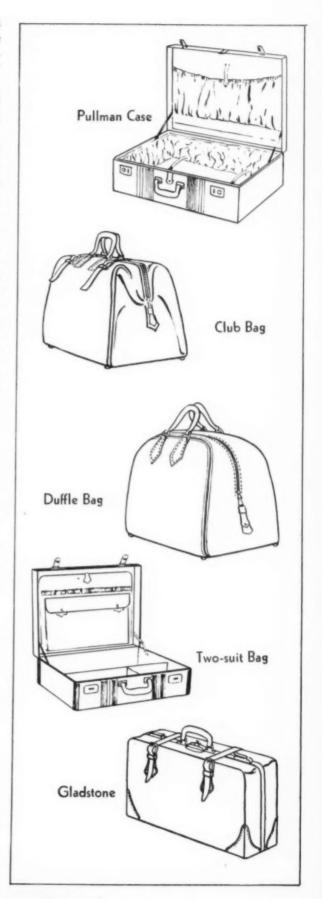
To recapitulate:

Go to a reliable store, unless you are personally conversant with luggage of different types and their characteristic defects and weaknesses of workmanship and material.

Ask questions, and if your questions appear not to be freely and honestly answered, go to another store.

Examine the contemplated purchase carefully and do not be afraid to let your examination take time and include all sorts of apparently insignificant details. Often a lot of details if skimped or faulty will add up to an unfavorable conclusion as to the probable quality of the luggage.

If you buy good luggage, take care of it, for its lasting qualities will depend largely upon the way it is treated in use and storage.



In Place of Silk Hosiery

ONE are the days when the words "women's hosiery" were synonymous with silk stockings. Nylon has already established itself in favor, and cotton stockings of various weaves have been pictured in the newspapers. Rayon hose, once found unsatisfactory, has been improved and is ap-

parently coming into its own through necessity. There are combinations of these fibers with each other and with wool, and prices vary as widely as the types of hose.

Although many silk hosiery counters still appear to carry a varied assortment and some stores have even held silk stocking sales, it is certain that stocks of silk stockings are becoming depleted and that substitutes will have to be resorted to. Stockings made from rayon and combinations of rayon with nylon have been on the market so short a time that their construction is still in the experimental stage. Some combina-

tions have proved to be definitely unsatisfactory. The National Retail Dry Goods Association has sounded a warning on this point and has urged salespeople to call the attention of their customers to the fact that some of the new substitutes may not be satisfactory with respect to wearing quality.

General Buying Advice

The first point to bear in mind when buying stockings of various types is the use to which they are to be put. Silk stockings, while they last, should be reserved for formal afternoon or evening wear—though silk stockings of the heavier weight, if available, give excellent wear for business and general utility. Nylons, which are sheer and have greater durability than silk, may also be saved for dress wear since, at the present time, a large part of the nylon supply is to be reserved for defense uses. Rayon stockings are definitely an "ersatz" product at their present stage of development although they are reported to be much improved over the rayon stockings of a few years back. Cotton or lisle stockings in many hosiery departments are of

the plain knit type which is suitable for general wear or of the coarse mesh type recommended for sports. Fine cotton mesh and lace constructions have been developed for evening wear and formal occasions, but will probably remain high in price and relatively scarce until a domestic source of supply for fine lisle yarn has been developed. Wool stockings, though long used almost exclusively for sports wear, are being developed in sheer and medium weights and in mixtures for daytime wear.



Nylon—as sheer as the thinnest silk, but does not fit quite so smoothly at ankle and knee. Runs like silk, but has higher wear resistance quality.

Nylon

Nylon, first in the field of satisfactory silk sub-

stitutes, was fast becoming popular before the silk shortage, and is at present the topranking luxury fiber. In the opinion of Women's Wear Daily, the outstanding trade journal in the field, nylon will probably remain the luxury fiber of choice even though silk may again become plentiful.

Unlike silk, there is only one quality of nylon yarn, though it is made in several sizes (deniers). Differences in prices of nylon hosiery are due to differences in construction.

Weights of nylon stockings are designated in deniers or yarn sizes, the lower the denier the more sheer the stocking. Sizes range from 15 denier (the finest), which corresponds to 1-thread silk, to 60 denier, which corresponds to 4-thread silk.

As many users already know, nylon hosiery is much more resistant to friction and rub-

bing than silk, but if a thread is snagged and broken the nylon stocking will run at least as easily as a silk stocking. The yarn itself is strong and highly elastic, but the finished stockings lack some of the stretchability of silk stockings and do not always fit quite as trimly around the ankles. Some wearers complain that nylon stockings have a cold, unpleasant feeling, but this reaction does not appear to be general. Other practical advantages of nylon stockings are the ease with which they may be washed and the

speed with which they dry. Since nylon does not absorb moisture, the stockings are resistant to water spots and stains. This same characteristic, however, may give them a somewhat clammy feeling on the feet since they do not absorb perspiration. Nylon hose should always be, and usually is, seamed with nylon thread, which adds to its good wearing qualities.

Cotton

Cotton has long been the standard yarn for children's socks, but it has been the stepchild among types of hosiery for women. It is probable that that status would have continued ex-

cept for the present complete cutting off of all sources of supply of silk, and the defense

needs for nylon.

The advantages claimed for cotton hosiery are its strength and durability, both when used alone or in combination with other fibers. It is absorbent. On the other hand, cotton hose loses its initial smooth surface and becomes fuzzy, does not fit snugly, and outer garments sometimes stick to it so that clothes tend to cling at the knees.

Sizes of cotton yarns are based on the number of yards of a given size which it takes to make a pound. (No. 80, 2 ply, is the coarsest used in women's hosiery; No. 160, 2 ply, the finest.)

The cheaper lines of cotton stockings are made of short-fibered cotton yarn, as the long-staple cotton fibers are reserved for use in the more expensive stockings. Carded cotton yarn is yarn in which the fibers have been smoothed, straightened, and freed of the fibers which are too short to be twisted into usable yarn. The better grades of cotton yarns are made of combed fibers; the combing process lays the fibers parallel and removes all but the longest and finest.

The best grades of combed cotton yarns are used in cotton lisle hosiery. Lisle yarn is fine, 2 ply, and very smooth. Its smooth-

ness is the result of its high twist and also of a gassing or singeing process which removes the fuzz. The finest quality lisle hose is of British or French origin and made of Egyptian long-staple cotton.

It is important when buying any cotton hosiery to inquire as to colorfastness. Cotton stockings will fade, unless they have been dyed with either "vat" or "sulphur" color.

Mercerization adds luster and durability to cotton yarns, improves their susceptibility to dyeing, and increases their absorbency, thus contributing much to the suitability of cotton yarn

Cotton—durable but not neat fitting. Somewhat bulky in appearance, but satisfactory for sports wear.

for use in hosiery both for men and women.

Wool

Wool hosiery is used almost exclusively for sports wear because of its warmth and cushioning effect. In women's hose, wool is usually combined with other fibers to make lighterweight wool mixture stockings.

Rayon

Up to the present, rayon hosiery has been mostly of the seamless type, cheap, and of relatively short durability, but nevertheless, in spite of these disadvantages, it has been bought in large volume.

We quote the garment trade newspaper, Women's Wear Daily, to which we are indebted for much of the information in this article, on the durability of the new rayon hosiery:

Rayon for hosiery can be durable. The quality and service features are being greatly improved by the new methods of handling the yarns and also by the developments in twists and finishes, all of which contribute to more silk-like characteristics.

These comments seem a bit on the optimistic side and we believe that many women will still regard rayon as third choice among hosiery yarns, at least at its present stage of development.

As with nylon, the size of rayon yarn is

indicated in deniers. Rayon yarns dye well when proper dyes are used and wash satisfactorily if carefully handled. It is important to remember that rayon is extremely weak when it is wet and must therefore be very carefully treated.

What to Look For

Construction and manufacturing processes of the new kinds of stockings are the same as those of silk stockings. and the buyer should look for adequate reinforcements at places of wear, adequate stretch through the welt (hem), proper length of leg, etc., just as if she were buying silk hose.

Circular-knit stockings in general do not fit as well as full-fashioned hose but those made of nylon are pre-boarded under high heat and will retain their original shape. Some of the better circular-knit stockings of other fibers are shaped somewhat by tightening the stitches about the ankle, but the cheaper ones are pre-boarded for shaping and lose their shape when washed. Mock seams in circular-knit hose are for appearance only and have nothing to do with shaping the hose.

Sizes in the good quality new stockings are proportioned as they have been for silk. Buying the correct size is most important, both for comfort and long wear, and any customer who is in doubt should consult the size chart which is available at any hosiery counter. It is a good rule to buy any stock-

ing ½ inch longer than the foot, but wool hose should be bought an inch longer to allow for shrinkage. It is also suggested that cotton hose be purchased ½ size larger than that ordinarily worn to allow for shrinkage.

Care Saves Wear

For best wear, stockings should be laundered with good neutral soap as soon as possible after they are worn. Mending should be carefully done, before laundering to pre-

vent possible runs during the washing process. Prevent snags by keeping finger nails and shoe linings smooth and removing your rings before putting your stockings on. Be sure that garters have not lost their elasticity, as poor elasticity in garters puts too great a strain on the elasticity of the stocking. Garters should always be fastened in the hem, not the leg of the stocking.



Rayon-not so sheer as silk or nylon. Fits loosely at the ankle and wrinkles at the knee.

It is hoped that this brief discussion will enable the consumer to select the proper type of stocking that will suit her own needs and pocketbook, and to care for

her hosiery in a manner that will extend its useful life-both matters of immediate concern to all in these days of shortages and rising prices.

Correction to Consumers' Research Bulletin

tive Number September 1941, Col. 88 Non-Proprietary Water Softeners and Detergents

Annual Cumula- Delete name of Ralph H. Luebbers, 7 Sunset Lane, Columbia, Mo., as a source of supply for non-proprietary tetrasodium pyrophosphate and trisodium phosphate. Mr. Luebbers is now in the military service of the United States and will thus be unable to continue serving subscribers needing these chemicals.

FLASHLIGHTS have assumed a new importance for many people faced with the pos-

sibility of blackouts and the special problems of interruption of electric power supply during wartime. Due to the "run" on flashlights, some manufacturers have sought to turn a quick profit by rushing onto the market with poorly designed and poorly made flashlights to be sold at high prices. Many of these flashlights are more distinguished for their novelty features and contrivances than for good sense in design. Actually, the problem of designing a simple, rugged, and durable flashlight is an easy one and it is unfortunate that the public, eager to buy flashlights, in many cases has had to accept de-

vices which are little more than junk. One exceptionally poor product, called *Victory*

Light (Fig. 1 at a), was purchased by CR for test at the nationally known Marshall Field & Company store in Chicago. The same unsatisfactory light has also been sold by Montgomery Ward & Co. If either store had engaged the services of an illuminating engineer or physicist to look over this flashlight for a few hours, its customers might have been spared the embarrassment of purchasing an article which is distinctly unsatisfactory, however successful it may be from the standpoint of advertising and novelty appeal.

Different types of flashlights have different fields of usefulness. For most purposes, the standard 2-cell tubular flashlight (Fig. 1 at **b** and **c**) using 2 size-D dry batteries and 2.5-volt (0.3-ampere) bulb is the most practical. For more light, at greater cost, a 2.4-

According to British experience, flashlights must not be used out of doors at any time during a blackout unless the light aperture has been reduced to not more than one inch in diameter (approximately the size of a quarter) and is also dimmed by the insertion of a piece of newspaper or its equivalent (two pieces of tissue paper are not an adequate equivalent). The light must be white and the flashlight must always be pointed downwards.



Fig. 1 Flashlights undergoing examination in CR's test.

(a) Victory Light; (b) Bright Star, disassembled; (c) Lightmaster; (d) Usalite, Army Type No. 72; (e) Usalite Swivel-Head; (f) Usalite Red-Head, No. RH-22S; (g) Niagara Junior Guide, No. 12; (h) Rex Ristlite; (i) Kompact Lite; (j) Micro-Lite; (k) Woolworth rectangular model; (l) Woolworth pear-shaped model; (m) Eveready Industrial, No. 1251; (n) Bond Voltpruf, No. 2161; (o) Rub-R-Lite; (p) Flash-Master.

volt (0.5-ampere) bulb can be used, or a flashlight using more than two cells.

With most tubular flashlights the light is projected from one end in the direction of the axis of the flashlight. With the Army type (Fig. 1 at d), however, the head is placed at right angles to the body and directs the light to the side instead of axially. There is also a flashlight (Fig. 1 at e) in which the head is movable and can be adjusted at various angles with the body. Another modification of the tubular flashlight (Fig. 1 at f) is equipped with a stand or bracket, so that the flash-

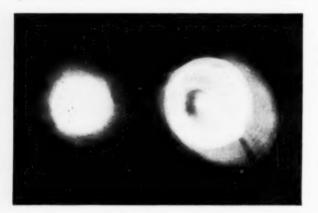


Fig. 2 Spot of light of desirable type (left) from a well-designed flashlight, and undesirable spot (right) afforded by a poorly designed flashlight or one improperly adjusted. Note the uneven illumination and the dark portion to the left of center. Such dark or poorly illuminated spots can be extremely disadvantageous in practical use of any flashlight.

light can be made to stand in various positions on a surface. These various modifications of the tubular flashlight are convenient when one has to set the flashlight down in order to be free to work with both hands.

One type of flashlight (Fig. 1 at g) is known as the lantern type (distinguished by having the cells of its battery side by side rather than end to end). The larger-sized batteries, No. 6 dry cells, which go with the largest lantern lights are best for use where a bright light is needed for considerable periods of time. The smaller sizes of lanternstyle lights, however, use two size-D batteries, like those in the standard tubular flashlights, and have no advantage over tubular flashlights, unless their shape is judged especially convenient or adapted to some particular use. A recent modification of the lantern type of flashlight (Fig. 1 at h) is designed to be attached with a rubber elastic

band to the wrist, a feature that is convenient for some uses, and certainly would be useful when changing a tire or repairing a motor or a pump.

A third type of flashlight (Fig. 1 at i, j, k, l) is a miniature type intended for carrying in a man's pocket or a lady's handbag. This gives a smaller amount of light (at very much greater cost per minute of use) than larger flashlights, but it is convenient for occasional short-period uses such as locating a keyhole or doing something else where a lighted match might otherwise have to be called on to furnish momentary illumination.

The light beams emitted by the standard tubular flashlights and lantern flashlights may be broad and diffuse or narrow and concentrated, depending upon the design of the flashlight. Some flashlights are made so that the focus can be adjusted and the beam changed from broad and diffuse to narrow and concentrated. The narrow, or spotlight, beam will carry for considerable distance, whereas the broad beam spreads a faint light over considerable area and is thus useful only for seeing nearby objects. It is desirable that the illumination afforded be as uniform as possible and that there be no dark spots, for nothing interferes more with the successful use of any light, especially for close or exacting work, than to have sharp changes in light intensity from point to point of the illuminated area. In general, flashlights with an adjustable focus do not give either a spotlight beam or a diffuse beam as satisfactory as given by flashlights designed to provide only the one or the other.

How to Select a Flashlight

If you have real need of a flashlight, now is a good time to buy, for materials used for production and the number of flashlights that can be produced have been recently curtailed by the War Production Board. When buying a flashlight, shine the light on a white surface three or four feet distant to see whether the illumination is uniform (Fig. 2). The reflector should be bright and wellpolished and the window or "lens" should be clear. Transparent plastic, which is being used for windows of most present-day flashlights, though less easily broken than glass, is easily scratched; for protection, therefore, the window should be slightly recessed, so that the bumps are taken by a protecting

rim or edge. The switch is particularly bad in most of the lights offered. See that when it is on, the light is absolutely free from flicker even when the flashlight is shaken.

The most convenient type of switch is one that permits either momentary operation by pressing a button or steady operation by sliding a boss or button, or a lever. A badly designed switch will often be turned on accidentally while the light is being carried in the pocket or tool box; this will often mean that when one is ready to use it, the battery is dead. Examine the body of the flashlight to determine whether it is strongly constructed and whether the threaded parts fit together securely. If a flashlight is to be given a great deal of use, as in industry or on a large farm or estate, one of the industrial, heavily-built type, which is more ruggedly made than the flashlights which the public usually buys, will be a desirable selection. Perfectly round cases are much less desirable than cases so shaped that they do not roll. Some flashlight manufacturers are thoughtful enough to provide a space for carrying a spare bulb. This is a highly desirable fea-

Care and Repair of Flashlights

If your flashlight is not in working order, don't buy a new one to replace it unless you are sure that it is beyond being adjusted or repaired. Probably the chief cause of damage or ruin of flashlights is the corrosion caused by leaving batteries in the flashlight case after they have gone dead. When such batteries leak and swell, as they commonly do, they corrode the inner parts so badly that repair may become impracticable. However, if you have flashlights that have been damaged in this way, keep the reflectors, lenses, and bulbs, for these may prove interchangeable with other flashlights purchased later.

In periods when a flashlight is expected not to be used, remove the batteries and store them in the coolest, driest place available. If the flashlight is used infrequently, it is worth while to inspect the batteries every two or three weeks (unless of the guaranteed-not-to-leak type) and discard them at the first sign of leakage.

Replacement glass discs to cover the bulb are hard to find, even in large hardware or appliance stores. However, two sizes of them can be purchased from Montgomery Ward & Co., Baltimore, Md. One way around the difficulty is to cut a disc of the right size from a piece of fairly thick transparent plastic if such material is at hand, or readily obtainable.

A tarnished or dull reflector should be polished with care, using a little very fine abrasive such as silver polish.

A flashlight carried in the car is best not kept in the glove compartment where the glass may be scratched or broken. A bracket specially made for mounting the flashlight on the steering post should be used.

Many of the better new flashlights are designed to carry an extra bulb. Considering how important such a bulb may be in an emergency, it is worth while to have a spare at hand, and if your light does not have provision for one, a spare bulb should be carried separately, preferably wrapped in cotton wool and stored in a small pasteboard or metal box.

Ratings are cr42 except as noted. In addition to the flashlights recently tested, ratings of several tested in 1941 have been repeated in abbreviated form for the convenience of our readers. Except as noted, all flashlights used 2 size-D (diameter 1-1/3 in.) battery cells. This is the size which should be preferred for ordinary home, farm, and similar small-scale uses.

Tubular-Type Flashlights

A. Recommended

Bright Star (Sold by Schulte stores) \$1 without batteries. Light beam of spotlight type. Case, well made, of colored plastic and contained space for an extra bulb. Lacked convenient 3-way switch giving "on," "off," "flash." An exceptionally good design in that it could be taken completely apart for cleaning or repair, which, as to the switch, is an especially advantageous feature and should be provided on flashlights of every make. Fig. 1 at b. 1

Eveready, No. 2251 (National Carbon Co., Inc., 30 East 42, New York City) 80c without batteries. Light beam of spotlight type. cr41 1

Wards Supreme Quality, Montgomery Ward's No. 86—4692. 98c plus postage, with batteries. Adjustable focus. cr41

Eveready Industrial, No. 1251 (National Carbon Co., Inc.) \$1.95 without batteries. Spotlight beam. Lacked 3-way switch. Round brass case covered with hard rubber. Construction rugged. Fig. 1 at m. 3

B. Intermediate

Lightmaster, Sears-Roebuck's No. 20—4452. 89c plus postage, with batteries. Adjustable focus to produce either spotlight or diffuse beam. Convenient 3-way switch giving "on," "off," "flash." Metal case with space provided for extra bulb. An undesirable feature of this light was that its reflector was not removable for cleaning or for replacing "lens" if accidentally broken. Might warrant an A rating. Fig. 1 at c.

Lightmaster DeLuxe, Sears-Roebuck's No. 20—4450. \$1.19 plus postage, with batteries. Spotlight beam and diffuse beam. cr41 1

Usalite Army Type No. 72, Montgomery Ward's No. 86-4676 (U.S. Electric Mfg. Corp., 228 W. 14.



Fig. 3 Tubular flashlight using 2 size-AA cells. A desirable type only when very small size is more important than economy of operation or strong illumination.

N.Y.C.) 98c plus postage, with batteries. Spotlight beam. Had 3-way switch. Head at right angles to body. Metal case. Very faulty design in that electrical contacts in head short-circuited batteries when bulb assembly was removed with switch left on. Fig. 1 at d. 1

Bond Voltpruf, No. 2161 (Bond Electric Corp., Jersey City, N. J.) \$1.30 without batteries. Diffuse beam. Reflector not smoothly polished. Light was turned on and off by tightening and loosening threaded bottom cap or by pressing on the center of the cap; inconvenient for single-handed operation. Brass case covered with rubber-like plastic. Well constructed. Fig. 1 at n.

Rub-R-Lite (William M. Lennan Inc., Pasadena, Calif.) \$1.55 without batteries. Soft rubber-covered waterproof case. Adjustable focus; focusing required removal of rubber case. Lacked 3-way switch. Tendency to flicker; contact spring in switch somewhat uncertain in action. Fig. 1 at o.

Usalite Swivel-Head (U.S. Electric Mfg. Corp.) \$1.79 to \$2.25 with batteries; also sold by Sears, Roebuck & Co., No. 20—4437, \$1.69 plus postage, and by Montgomery Ward & Co., No. 86—4675, \$1.79 plus postage. Spotlight beam. Had 3-way switch. Swivel head adjustable through 180° angle. Plastic case, metal trim; faint unpleasant odor. Plastic window of unsatisfactory transparency. Fig. 1 at e. 3

C. Not Recommended

Usalite Red-Head, No. RH-22S (U.S. Electric Mfg. Corp.) \$1.35 with batteries; also sold by Sears, Roebuck & Co., No. 20—4462, \$1.09 plus postage. Adjustable focus. Had special head throwing a part of the light, colored red, sideways as warning signal. Had 3-way switch. Metal case, plastic trim. Equipped with adjustable bracket for standing flashlight at angle. Plastic cap at end of flashlight insecure due to badly fitting threads. Fig. 1 at f. 2

Lantern-Type Flashlights

A. Recommended

Delta Juniorlite (Delta Electric Co., Marion, Ind.) \$1.89 without batteries. Designed so that either



Fig. 4 Flash-Master. Mechanical flashlight; operated without batteries by working a hand lever which spins an electrical generator. This light has serious faults in design.

of two bulbs could be switched on, one for spotlight beam, one for diffuse beam. cr41 3

Delta Powerlite (Delta Electric Co.) \$3.35 without batteries. Like Delta Juniorlite in having two bulbs, one for spotlight beam, one for diffuse beam. Used 6-volt lantern battery (or 4 size-D cells in adapter at 50c extra). cr41 3

B. Intermediate

Niagara Junior Guide, No. 12 (Niagara Searchlight Co., Niagara Falls, N. Y.; sold at Woolworth and other stores) 35c without batteries; also sold by Sears, Roebuck & Co., No. 20—4801, 45c plus postage, with batteries. Adjustable focus. Case of thin metal, enameled in red. Construction fairly good, despite low price. Fig. 1 at g. 1

Rex Ristlite (Flashlight Co. of America, Jersey City, N. J.) 98c without batteries; widely sold in 5-10-25c stores, also by Montgomery Ward, No. 86—4688, 92c plus postage, with batteries. Spotlight beam. Plastic case had bail for supporting flashlight at varying angles on solid surface, and an adjustable elastic band for fastening to the wrist. (See text for further comment.) Screwdriver (or knife blade) required for changing batteries or bulb (inconvenient). Fig. 1 at h.

Delta Wildcat (Delta Electric Co.) \$1.89 without batteries. Used 2 or 4 size-D cells. Like Delta Concluded on page 17

Alarm Clocks

Non-Electric Types

purposes. Their chief function, of course, is to serve as an alarm—usually to wake up a sleeper in time to go to work in the morning, sometimes perhaps to remind a housewife to take something out of the oven. For many, they also serve as time-keepers, but generally do a poor job of this. Even the more satisfactory ones, after careful regulating, can be counted upon to keep time only within about three minutes a day. Some days they may do better than this, but they cannot be relied upon for closer timekeeping.

Though alarm clocks play an important part in keeping the production of war materials moving forward on schedule, their manufacture in common with that of most other consumers' goods has been curtailed. If you need to buy an alarm clock in order to get to your job on time, it is wise to buy it now while there is still considerable choice possible in the retail market.

Alarm clocks differ in several important ways. Some keep time much better than others. There are also differences in loudness of ticking—a matter of consequence to many people who find that loud ticking is

not conducive to sleep—and differences in ease with which they are wound or with which the alarm indicator or the hour and minute hands are set. They differ, too, in small matters of convenience; on some clocks, for instance, the small dial which shows the setting of the alarm is hidden by the hour and minute hands at certain times and, hence, is not conveniently set.

In CR's test the clocks were compared for timekeeping properties at normal room temperatures, at temperatures inside a refrigerator (which might correspond to room temperatures in a bedroom with the window open in wintertime), and at warm, summertime temperatures. A good alarm clock, if kept at steady temperature, should keep time within about three minutes for a full day after it has been set. Some clocks in CR's test failed to do this-one clock lost a half hour during a period of twenty-four hours, although on the preceding day of the test at the same temperature it kept quite good time. The clocks were also examined for construction, ease of winding and setting, and loudness of ticking.

Ratings are cr42.

FLASHLIGHTS

[Continued from page 16]

Juniorlite in having two bulbs, one for spotlight beam, one for diffuse beam. cr41 3

C. Not Recommended

Victory Light (Safe Delay Switch Corp., Chicago; sold by Marshall Field & Co.) \$1.39 with batteries; also sold by Montgomery Ward, No. 86—4727, \$1.29 plus postage, with batteries. Diffuse beam. Had three detachable and interchangeable thin plastic windows, red, white, and blue, respectively. Metal case with fiber back. A novelty light attractive to the uninitiated, but of generally poor design and construction. Fig. 1 at a. 2

Miniature-Type Flashlights

B. Intermediate

Kompact Lite (Manufacturer unknown; sold at 10cent stores, drugstores, etc.) 39c with batteries. Oblong plastic case. Used 2 size-AA cells (diameter 9/16 inch). Fig. 1 at i. 1

Micro-Lite (Micro-Lite Co., 44 W. 18, N.Y.C.; sold at Woolworth stores, drugstores, etc.) 25c with battery. Cylindrical plastic case. Used one size-AA cell. Fig. 1 at j. (Other cylindrical flashlights using 2 size-AA cells are also available at about 30c without batteries. Fig. 3.)

No brand name (Sold at Woolworth stores) 30c without batteries. Rectangular, box-shaped metal case, 11/16 in. x 1-1/4 in. x 2-3/4 in., finished in red and black enamel. Lamp recessed into one of flat faces. Used 2 size-AA cells. Fig. 1 at k.

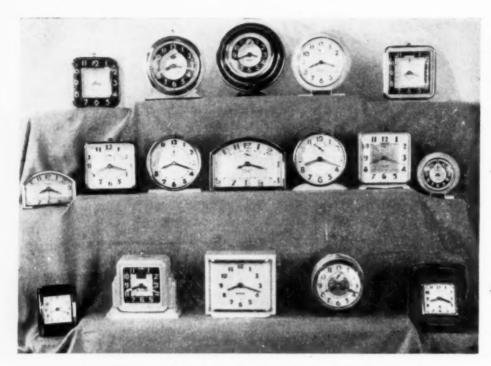
C. Not Recommended

No brand name (Sold at Woolworth stores) 30c without battery. Pear-shaped, brushed-brass-finish metal case, about 2¾ in. long. Used 2 size-AA cells. Flimsy construction. Fig. 1 at 1.

Dynamo Flashlight

C. Not Recommended

Flash-Master (Manufacturer unknown; sold by Hoffritz Cutlery stores, N.Y.C.) \$3.50. Operates without batteries by working a hand lever. Several defects. Hardly practical in its present form—better for exercise than for illumination. Fig. 4 and Fig. 1 at p. 3



Alarm Clocks in CR's Test—Reading from left to right:

Esquire, No. 932; National Call (Ingraham); Ingersoll Mercury Radiolite; Westclox Shelby, No. Westclox Big Ben Chime, No. 225; Ingersoll Liberty Radiolite. Middle row. New Haven Ideal Junior; Gilbert Fordyce; Westclox Bingo, No. 94; New Haven Ideal; Gilbert Bellhop, No. 4639-N; Ingraham Earlyray; Westclox Baby Ben. Bottom row. Westclox Travalarm; National Call (Gilbert); Westclox Shelby, No. 110; New Haven Slumber Slopper; New Haven Tourist, No. 1.

A. Recommended

Westclox Baby Ben (Westclox Div., General Time Instruments Corp., La Salle, Ill.) \$4.50. Luminous dial. One-day movement. Alarm had two degrees of loudness. One of two quietest-running clocks

Westclox Big Ben Chime, No. 225 (Westclox Div., General Time Instruments Corp.) \$3.75. Non-luminous dial. One-day movement. Alarm had two degrees of loudness. One of two quietest-running clocks tested.

B. Intermediate

Gilbert Bellhop, No. 4639-N (The William L. Gilbert Clock Corp., Winsted, Conn.) \$1.19. Non-luminous dial. 40-hour movement. Ticking, relatively

Gilbert Fordyce, No. 4673-N (The William L. Gilbert Clock Corp.) \$1.19. Non-luminous dial. 40-hour movement. Ease of setting, not good. Noisy.

New Haven Slumber Stopper (The New Haven Clock Co., New Haven, Conn.) Non-luminous dial. 30hour movement. Sharp corners on base. Noisy. Manufacture recently discontinued.

Westclox Bingo, No. 94 (Westclox Div., General Time Instruments Corp.; sold by Montgomery Ward & Co., Cat. No. 45-999, \$1.65 postpaid) \$1.50. Nonluminous dial. 30-hour movement. Noisy.

Ingersoll Liberty Radiolite (The Ingersoll-Waterbury Co., 60 E. 42, New York City) \$2.50. Luminous dial. 40-hour movement. Ease of winding and of

setting, not good. Noisy.

National Call (The William L. Gilbert Clock Corp.; sold by Sears, Roebuck & Co., Cat. No. 4-8517, \$2.15 plus postage) Luminous dial. 30-hour movement. Noisy.

New Haven Ideal Junior (The New Haven Clock Co.) \$2.50. Non-luminous dial. 30-hour movement. Had one winding key, winding alarm and time movement simultaneously. 2

New Haven Ideal (The New Haven Clock Co.) Non-luminous dial. 30-hour movement. Comparatively unstable on base. Noisy. Manufacture discontinued.

110 (Westclox Div., General Time Instruments Corp.; sold by Montgomery Ward & Co., Cat. No. 45-987, \$3.02

postpaid) \$2.75. Non-luminous dial. 30-hour movement. Timekeeping, below average. Noisy.

Ingersoll Mercury Radiolite (The Ingersoll-Waterbury Co.) \$3.50. Luminous dial. 40-hour movement. Ease of winding, not good. Noisy.

National Call (The E. Ingraham Co., Bristol, Conn.; sold by Sears, Roebuck & Co., Cat. No. 4-8538, \$4.49 plus postage) Luminous dial. 8-day movement. When alarm was shut off it was automatically reset to ring 24 hours later.

New Haven Tourist, No. 1 (The New Haven Clock Co.) \$4.55. Non-luminous dial. 30-hour movement. Timekeeping, below average.

Westclox Travalarm (Westclox Div., General Time Instruments Corp.; sold by Sears, Roebuck & Co., Cat. No. 4-8548, \$4.35 postpaid) \$3.95. Luminous dial. One-day movement. Had one key for winding alarm and movement simultaneously.

C. Not Recommended

Esquire, No. 932 (Lux Clock Mfg. Co., Waterbury, Conn.; sold by Montgomery Ward & Co., Cat. No. 45-932, \$1.49 plus postage) Luminous dial. 30hour movement. Timekeeping performance was not good (well below average). Noisy. Not in latest Montgomery Ward catalog.

Ingraham Earlyray (The E. Ingraham Co.) \$1.19. Non-luminous dial. One-day movement. Ease of winding and of setting, not good. Timekeeping performance was not good (well below average). Noisy.1

How to Place Your Car in Storage

NLESS THE WASHINGTON AUTHORITIES controlling the economic life of consumers authorize the production of some type of automobile tire, even though it be made entirely of reclaimed rubber and have a short life, millions of American motorists, when their existing tires wear out, will be faced with the unpleasant choice either of selling their cars or of storing them until better times. In the meantime, consumers will have to adjust themselves to more extensive use of trains, buses, bicycles, the horse and buggy, the saddle horse, and whatever other means of transportation are available and can be revived for the emergency. (Even the revival is no mean problem, since any large restoration of the horse and buggy to its old-time place in American life would involve enormous problems; the revival of the bicycle, too, involves use of the scarcest of all common materials—rubber.)

Present indications are that the best policy is to place the car in storage, rather than sell it, for when the war is over, new cars will not be available for a considerable time. whereas tires may be available almost immediately. Besides, we think there is more than a fair chance that the pressure of public opinion, which is pretty intense on this question, anyway, may force government officials really to turn the problem of synthetic rubber production over to some scientists and production engineers of competence and get large-scale production of substitute rubber actually in motion, with more rubber, and fewer "handouts" by publicity men of Washington's countless Bureaus, Boards, and Authorities.

The advice to store a car must be qualified, however. For many city dwellers storage cannot be obtained at reasonable rates, thus consumers living in the city where storage rates are high may decide either to sell their car or to move it out to some country town where dead-storage room can be rented for a small sum.

Though an automobile represents a very considerable investment, in almost any family, which should make it deserving of the greatest care in preservation, many people give no serious thought whatever to the problem of keeping a car in good condition when

it is out of use. An automobile is a highly co-ordinated and delicate mechanism, and it isn't enough to raise its axles up on jacks or blocks and then go away and forget about it. The following list represents the minimum precautions that should be taken to care for a car out of service.

1. Take the car to a competent, conscientious service man; have it washed and thoroughly and completely greased and oiled, have the crankcase drained and refilled with S.A.E. 30 or 40 oil. Have the body carefully waxed to preserve the finish. Especially in sections where calcium chloride is used on the roads in winter the underparts of the car should also be thoroughly and carefully cleaned, preferably with steam. Spraying afterwards with oil would be desirable.

2. Drain the cooling system completely, being careful to save the contents if the system contained anti-freeze.¹ In most cars, to drain completely it is necessary to open the cock or plug in the engine block as well as the cocks at the bottom of the radiator. In cars equipped with hot-water heaters it may be necessary to remove the heater from the car in order to drain it, and prevent freezing or other damage.

3. Drain the gasoline from the tank. In most cars, this will require the use of a siphon. **CAUTION:** Do not take a plain rubber tube and suck the air out to make it function as a siphon. (Gasoline is a poison, and ethyl gasoline is a particularly deadly poison—even its vapor should not be inhaled.) Regular siphon tubes with an attached rubber bulb to start the flow are available for this purpose. There are 2 reasons for draining the gas tank: first, because gasoline evaporates and leaves a hard or gummy deposit in the fuel tank, line, carburetor, etc., which can cause considerable trouble when the car is used again; second, it will help to reduce the fire hazard.

4. Start up the engine to use up any gasoline in the carburetor, fuel pump, fuel line, etc. If possible, do this with the car outside the garage; if not, with the exhaust pipe, at least, projecting outside the garage. Then, when the engine stops, the car can be pushed

See "Save Your Anti-Freese," Consumers' Research Bulletin, March 1942.

to its proper resting place within. (There is always some risk in running an engine inside a building, even with big doors wide open, and there are few who are conscious of the extreme deadliness of gasoline exhaust gases.) After the engine has run out of gasoline, any still remaining in the carburetor or fuel pump should be removed by opening the draining cocks. Close these cocks immediately afterwards, otherwise one or more of them is pretty sure to be forgotten when the car is taken out of storage to be used again.

5. Obtain four sturdy wooden blocks and jack the car up onto them. (Such blocks should be at least 6 x 6 inches in horizontal cross section, and for the average modern car will need to be about 12 inches high.) Don't use blocks of dubious strength, soundness, or stability. The height (length) of the blocks in any case should be such that when the car rests on them, the tires clear the ground or floor by a half-inch to an inch. If possible, the top and bottom surfaces of the block should be flat and parallel to each other so that when the car rests on them there is no danger of its slipping off or being pushed off by a chance bump. In cars equipped with independent front-wheel suspension, it is particularly important that the front blocks be placed as close to the wheels as possible. With the Sizaire type of indipendent suspension this would be directly under the coil springs.

6. Assuming tires in sufficiently good condition to be worth preserving, they should be partially deflated. Rubber keeps best in a dark, cool place; hence, it would be advisable to remove the tires, complete with wheels, and the spare from the car. Wrap them with dark-colored or brown paper to reduce access of light and air, and store them in the coolest place available, and, above all, in such a position that any spillage, spattering, or leakage of oil or chemically active material could not reach any part of the tire. They should be stored in such a manner that they will not be deformed. Do not store them on top of each other. If there is the least doubt about the tires being safe from theft-even poor tires—take them off and deposit them in some cool and safe place. (For important information on the proper care and storage of rubber goods that are not in use, see Con-SUMERS' RESEARCH BULLETIN, March 1942.)

7. Remove the spark plugs and pour one

ounce of S.A.E. 30 or 40 oil through each spark-plug hole. Replace the spark plugs and turn the engine over two full revolutions to distribute the oil over the cylinder walls (with the too-modern cars that are not supplied with hand cranks, it will be necessary to use the starter for this purpose, but care must be taken to engage it briefly; otherwise, the oil will be lost through the exhaust).

8. Cover the metal parts inside the distributor head with a **thin** layer of vaseline. Any other parts of the car that are prone to rust due to defective plating or absence of plating may be greased in the same way with a coating of vaseline or automobile grease of similar consistency.

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9. Remove the battery and follow instructions for its preservation as given in Consumers' Research Bulletin, April 1942.

10. The upholstery must be protected against moths and mice by sprinkling moth balls over the seats. Three pounds of moth balls have been recommended, to be placed on floors, and under and on seats. (Placing them on top of sheets of paper will prevent risk of staining.) The windows and ventilators must be kept closed for this treatment to be effective, and to make the protective material last longer, if a considerable period of storage is in prospect, the openings around clutch, brake, accelerator pedals and rods. and the like should be lightly plugged with some material such as oakum (obtainable from plumbers). (Remember to take this out before the car is to be used again.) Even if upholstery is of leather, moth balls are of value in discouraging inroads of mice. With leather upholstery, however, some slight ventilation should be provided by leaving the windows open a crack at the top and leaving pedal and other holes open in the ordinary way, to prevent mildew. Either naphthalene or paradichlorobenzene will serve for protection against rodents, but the naphthalene (moth balls) will be more economical. In any case, the moth balls will need to be observed from time to time and replaced when nearly evaporated. Complete protection against moths is far more difficult to achieve in an automobile than in a tight chest or box; perhaps the safest procedure would be to use about ten pounds of naphthalene or paradichlorobenzene flakes, examining the car from time to time to see

On Cultivating the Home Vegetable Garden

When to Cultivate and When Not to Cultivate

R IS HAPPY TO ADVISE SUBSCRIBERS WHO are raising victory gardens, that they should not cultivate them too much. This will be good news to those who wish to enjoy the benefits to be had from a home or kitchen garden without overwork, or too much exercise. While it is true that a difference of opinion exists among gardeners as to what cultivation is supposed to accomplish, well-qualified agricultural research men now agree that gardeners in the past have done a great deal of unnecessary hard work.

In experiments extending over a period of years, carrots, cabbage, and tomatoes, for example, showed no significant increase in yield due to cultivation as compared with light scraping of the soil to keep down weeds. With beets and onions there was a very small gain from cultivation. Of six vegetables, celery was the only one, due perhaps to its confined root system, which showed large and consistent gains from cultivation, amounting on the average to 24%.

Cultivation is useful primarily for destroying weeds, as stated in Professor Mack's article on Home Gardening in the April BulLETIN. But much cultivation has been mistakenly done in order to create a loose layer of fine earth on top of the soil, a dust mulch, the theory being that the mulch of dry soil destroys capillary action in the soil and thereby slows down movement of moisture to the



Fig. 1 Convenient hand tools for cutting off garden weeds close to the surface of the soil—garden hoe and scuffle hoe (right).

surface, and its subsequent evaporation.

Professor H. C. Thompson of Cornell University has very kindly furnished CR with a memorandum of very timely and practical information on how to cultivate. He states that while a dust mulch helps to reduce loss of deep-lying moisture, it has been found actually to accelerate the loss of moisture close to the surface. Since a light rain moistens only a few inches of soil, cultivation unless

I Among those who have reported this important observation are Professors H. C. Thompson of Cornell, and F. G. Merkle and C. J. Irvin of Pennsylvania State.

HOW TO PLACE YOUR CAR IN STORAGE

Continued from page 20

that some still remain. A mixture of flakes and balls might be still better since the balls would afford a more persistent though less energetic source of fumes.

11. A dust cover of heavy paper or cloth should be placed over the car, particularly if it is stored in a garage in which the sun can enter and fade the paint or the upholstery. An alternative to this, of course, is to equip the windows of the garage with window shades and keep them drawn.

12. If the car is equipped with a radio, it may be worth while in some cases, especially in damp climates, to remove the set and store it in the house or attic in a **dry** place

(not in the basement or other place which can at times become damp).

13. Any valuable equipment in the trunk or luggage space should be removed and taken into the house. Ordinary items, such as tire chains, tools, and jack, if of good quality, should be well oiled or greased and wrapped in wax paper to reduce damage by rust.

14. Cancel or suspend, by having an endorsement issued, your liability insurance policy, and obtain proper refund, but be sure the car is duly covered against fire (and possibly theft, depending upon your particular circumstances of storage).



Fig. 2 Desirable type of weeding attachment in place on a wheel cultivator.



Fig. 3 Hand toothed-cultivator.

delayed a few days results in loss rather than conservation of moisture. Shallow cultivation helps to conserve deep-lying moisture when the plants are small; but after the plants have developed roots throughout the soil and the moisture is limited, not much moisture reaches the surface from below anyway, because the roots absorb it as it moves upward. Cultivation after the plants are

half grown may injure some of the roots, particularly if done too deeply; it is likely on the whole, therefore, to do more harm than good unless weed growth is troublesome. Hence, gardeners should make a practice while the plants are young of cultivating as often as necessary to keep weeds from growing and should stop cultivating about the time plants are half-grown, unless weeds are troublesome.

The best way to combat weeds, and the easiest, is to employ a tool that cuts the weeds just below the surface. Useful hand tools for this purpose are shown in Fig. 1. A similar attachment for a wheel cultivator is shown in Fig. 2. When such tools are not available, a small-toothed cultivator, such as shown in Fig. 3, or a metal garden rake, can be used satisfactorily for uprooting small weeds.

Note on Pamphlet Reference Material for Home Gardening

Several references to federal and state bulletins on home gardening were given on page 13 of the April Bulletin. CR believes that the amateur gardener's chief reliance should be upon the bulletins available from the county agricultural agents and the agricultural college in his own state rather than upon the U.S.D.A. publication Victory Gardens, particularly when choosing what vegetables are to be planted. The practical soundness or wisdom of much of the advice given on this matter in Victory Gardens is open to question. (As one of several pertinent instances, the row of Swiss chard 100 feet long that is recommended on page 7 would normally supply several times as much of this vegetable as most families would care to use.)

RATIONED SCARCITY OR ABUNDANT PRODUCTION?

[Continued from page 2]

age city dweller does not have space in which to store any great amounts of sugar even were she inclined to do so. The sugar rationing, therefore, brings home the scarcity question as never before.

True, health authorities have pointed out for years that American consumption of sugar is far too high for health, and there is no doubt that on this score a reduction in home and food-factory use of sugar may be a blessing in disguise. On the other hand, there are independent-minded consumers who resent having their health prescribed for in any sort of totalitarian fashion, at least so long as the government was restricting sugar crops and imports as a basic part of the we-planned-it-that-way order of society.

There is much evidence that there need be no actual shortage of sugar at all if the Administration were to lift crop and quota restrictions and cut all red tape impeding the manufacture of alcohol from stored, carried-over corn and wheat for the manufacture of alcohol for smokeless powder. Some of these stored crops are seriously depreciating and parts of them are to be destroyed or burned, ultimately, on that account and to keep them from depressing farm prices. One prominent trade journal not long ago commented that the War Production Board had finally taken steps for obtaining from grain more of the alcohol needed in munitions, and that this action had knocked the props from

[Concluded on page 23]

under consumer rationing of sugar. "But," continued the journal, "rationing will be applied just the same, and once it is on, it will stay on for the duration. It's a war psychology move now. Besides that, Henderson's Office of Price Administration wants experience on rationing of articles of general consumption."

If the good American citizens of this country were convinced that the shortages were inevitable and really necessary to supply arms and munitions to our armed forces, they would, for the most part, cheerfully patch their tires, tighten their belts, and make the best of things. On the other hand, to ask people whose livelihood and entire economic existence depend upon their ability to get tires to do without them is a sort of governmental "lock-out" of the workingman from his job, whether he be clerk, executive, salesman, or factory worker. Furthermore, to ask the busy housewife with many extra demands on her time for civilian defense and Red Cross and other important war-centered activities to adapt her menus and replan her meals to eliminate her accustomed quantity of sugar as a kind of practice dietary blackout for the development of war psychology is to show a complete lack of understanding of the American temper.

Many government officials charged with the planning and execution of today's rationing program were wont to eat in some of the very best speakeasies in Prohibition days and they should remember that, in spite of thousands of enforcement-agents, consumers got what they wanted and were willing to pay for. The price was high for the bootleggers' goods, and higher still in moral and social ill-effects on the country as a whole, especially the breaking down of respect for the law and police officials.

The results of a wide-spread "black market" in a number of consumer commodities will likely be many times as bad as those brought about by Prohibition. The appeals from various government officials to consumers to resist making purchases on the bootleg markets cannot be expected to carry much weight when there is such open talk of rationing sugar not because it need be scarce but to put people into the proper frame of mind about sacrifices for the war. It is already known that a bootleggers' market is being built up in tires. One quotation, for example, in the middle of March for four good tires was \$150. The man whose livelihood (and also ability to pay his taxes to local and national governments) depends upon his getting to and from work in his car may consider that a small price to pay even though it be five times the price of a few months before.

There is much talk on the part of Washington bureaucrats of the dire penalties that will be visited on the operators of the "black market." When we consider the large force of prohibition agents required for enforcing the Prohibition Act on liquor alone, it becomes only too clear that policing of the almost infinite number of individual lots of all the commodities now being contemplated for rationing might even require such a tremendous field staff of enforcement officers that there would be no talent available to deal with actual spies at work collecting information for the enemy on troop movements, weather conditions, position of transport and supply ships, and other vital military data.

Certainly such rationing enforcement-agents would use up more rubber in transportation than could possibly be spared if the shortage of rubber for defense uses is as desperate as government officials have asserted.

It is a pity that those who are putting on "morale" programs over the radio depicting the sacrifice, the rugged independence, and the struggles for freedom of the bold and brave men in 1776, do not fully appreciate the application to the present times of the historical events which they are dramatizing. One aspect of the early American struggle was the arrogant insistence that the colonists buy government-taxed tea, which in a sense corresponds to the sugar rationing of the present day. In the struggle to enforce their will, the bureaucrats lost the major portion of a continent.

Cannot the Washington planners learn from history that it is their job to supply the military goods and munitions needed by the Nation's fighting forces to win the war and next to supply for the economic needs of American consumers, goods essential to maintain health, and morale, which render possible the efficient performance of daily tasks that underlie all living and working, all of which are likewise essential to winning the war? It is *not* within the proper scope of the duties of the Washington officials to play games with the Nation, for the sake of building a war psychology or morale.

The suspicion is gaining ground throughout the country that the job of directing American production and distribution of goods is much too big a job to be handled successfully by any single group of men in Washington, D. C. It is too big, indeed, to be handled in any other way than by many groups of experts of high qualifications, experience, and initiative, working in all the various major industrial centers of the countryengineering and production experts who know factories from the inside, and who have personally and successfully managed and operated functioning, complex, productive enterprises. Such men would try to solve as many of their problems as possible by more and better production, not evade them by stopping production and setting up some new F.I.S. rationing scheme.

Preventing Moth Damage in Wool Fabrics

When storing woolen clothes and blankets special care should be taken this year to protect them against moths, for in wartime woolen fabrics become more and more scarce and difficult to replace. Before putting them away, they should be freed of moths, and their eggs and larvae; then they should be placed in tight containers which moths cannot enter. If there is any doubt as to whether the woolens are free from infestation they should be packed away with a chemical insecticide as described in the following.

There are a number of ways of destroying moth eggs and larvae; they can be killed by heat or by chemicals. Certain rules, however, must be carefully followed to be sure of success. Dry cleaning kills moths in all stages of development.

One of the most practical ways for the housewife to kill moths in woolens stored for the summer is to use naphthalene or paradichlorobenzene flakes or balls.¹ These are widely sold in ten-cent stores and drug stores. The present price for naphthalene is about 10 cents for 10 ounces; paradichlorobenzene is more expensive and at present more difficult to obtain. Plan to use one pound of either chemical for an average size trunk or for 6 to 10 cubic feet of closet space (a somewhat smaller amount would serve if the container is quite airtight).

These substances slowly vaporize and permeate the wool materials. The vapors being heavier than air gradually diffuse downward. The storage container should, therefore, be tight and especially so at the bottom and sides. Steel wardrobes, for those who have them, are convenient and satisfactory for storage since they can be made quite tight. The naphthalene or paradichlorobenzene should be placed in shallow, uncovered boxes or in bags of net or coarse muslin at the top of the wardrobe. To avoid possible staining of garments, it is safest on the whole to keep them from any direct contact with the flakes or balls. The door of the wardrobe should fit very tightly, and finally the crack between the door and the jamb should be sealed with

masking or decorators' tape. Masking tape is available from the two large mail-order houses at 25 and 29 cents for a 30-foot roll. A well-made trunk or chest with lid opening upwards makes a good container provided it is tight on the bottom and sides. An abandoned ice-refrigerator, turned on its back and with the drain stoppered, could also be used as a chest for wool and fur-trimmed fabrics.

In tight containers the naphthalene or paradichlorobenzene can be relied upon to kill all moth infestation after a few days, but only in tight containers. Perforated devices containing these chemicals or others to be hung in clothes closets which are in daily use and not tight are valueless. They produce a strong odor but do not kill or positively repel moths. Since paradichlorobenzene and naphthalene vapors are poisonous, breathing of them should be avoided.

If all moth infestation is removed from woolens by dry cleaning, heating (sufficiently long continued), or brushing, they can be safely stored away in tight boxes, trunks, cedar chests, paper garment bags, or wrapped up in tight (sealed) paper bundles. Every crack in such containers where a moth might enter should be sealed with gummed or masking tape.

Heating is a practical method to destroy moth infestation. The woolens can be placed in a closet which is heated to a temperature between 125°F and 140°F and held at that temperature for about 10 hours, or they can be put into a cabinet or box surrounding a steam radiator. The temperature should be checked with a thermometer.²

Sunning, airing, and brushing are a good and inexpensive way to rid clothes of moths. Moths fly away from garments in bright sunlight, the moth larvae drop off, and the eggs, which are delicate, are easily removed or damaged by brushing.

It is understood, though it is not certain, that naphthalene will not be generally available in future, but paradichlorobenzene is expected to be available, at least in limited quantities.

Any makeshift method for bringing about this high temperature may involve fire hazard or risk of damage to clothing due to non-uniform temperature distribution, in any case where a high-temperature heat source is used. The method involving a cabinet or box surrounding a steam (or in some cases, a hot-water) radiator is deemed saiest for home use to avoid risk of local damage to garments and all possibility of fire hazard. (One should, of course, avoid any verv prolonged contact with or proximity of clothing to a hot radiator.) The hottest part of an attic in some houses and climates may often afford on hot summer days a sufficiently high temperature for the purpose. Two or three days of such storage might be necessary to achieve the effect desired.

Care of Leather Shoes

ONE of the most certain things about consumers' goods in the present very uncertain situation is that leather goods of good quality are going to be scarce. Hence, those which we have must needs be taken care of much more carefully and made to last much

longer than in the past.

The first essential in taking care of leather shoes is to keep them dry. With repeated wetting most of the original oil of shoes or boots is lost so that upon drying, the leather becomes hard and brittle. To protect the shoes as well as the wearer, rubbers or galoshes should be worn in wet weather. When shoes are to be worn in wet weather unprotected by rubbers, they should be given a waterproofing treatment.

Whether they have been waterproofed or not, shoes that have become wet must be dried slowly at temperatures no higher than are easily borne by the hand. Keep shoes away from a hot stove or radiator, for a shoe which is exposed to the radiant heat from a near-by stove, stove pipe, or radiator may become very much hotter than the air in the

room at the same point.

The second essential in caring for shoes is to keep the leather soft. Application of oil helps to make leather soft and at the same time water-resistant. Shoe polish, because of the wax which it contains, also helps to make leather resistant to water by acting as a surface seal. However, even if street shoes are kept polished, occasional oiling

may be desirable.

For shoes that are to be polished, castor oil is the best kind of oil to use as a softening agent, and to improve water-resistance. A commercial or ordinary grade of castor oil will be used if obtainable, not the pure, medicinal grade. The oil should be applied to the uppers lightly and evenly with a cloth and rubbed into the leather. Shoes which have been wet should be oiled while they are still damp. In this way, during drying, the oil protects the grain of the leather from excessive concentration of the water-soluble constituents of the leather that are drawn to the surface by capillary attraction. (These, if accumulated at the surface through failure to give wet leather proper treatment after wearing, tend to produce a brittle or "cracky"

grain.) After a day to allow time for the leather to take up the oil, the shoes can be polished reasonably satisfactorily.

Leather shoes that do not require to be polished can be more effectively treated against mud and water by applying freely animal oil or grease, such as neat's-foot oil, tallow, wool grease, or a mixture of two or more of these. Both the shoes and the oil should be warmed, but not to a temperature hotter than the hand can readily bear, and the shoes should be kept warm to assist in absorbing the oil. When the footwear is worn regularly in snow, mud, or water, the oil and grease must be frequently restored; apply the oil or fat when the leather is still damp but not too wet.

Any of the oils or greases that have been mentioned can be used on leather soles as well as on the uppers to make them water-resistant. A medicine dropper makes a convenient tool for applying oil to the edge of the soles and to the welt. Let the oil seep into the joint between the sole and the upper. If there is any rubber present (i.e., rubber heels), take great pains to keep the oil from coming into contact with it, for oil, except castor oil, is very harmful to rubber.

For waterproofing shoes which occasionally or regularly get wet, such as garden shoes, hiking shoes, sporting boots, or work shoes, any one of the following formulas which are recommended by the United States Department of Agriculture may be used:

Formula 1

Natural wool grease		0 0 1		0 (0	0	8	ounces
Dark petrolatum (or v													
Paraffin wax						0	0			0	0	4	ounces
	Form	uls	à.	2									
Petrolatum											. 1	6	ounces
Beeswax							0	 0	•	0		2	ounces
	Form	ula	1	3									
Petrolatum									0			8	ounces
Paraffin wax								 0	0	0		4	ounces
Wool grease								 0		0		4	ounces
Crude turpentine gum													
(technical name: gun	n thus)		9 1	0	0				0	0	2	ounces
1	Form	ula		4									
Tallow					0						. 1	2	ounces
Cod Oil												4	OHIDOOR

Melt together the ingredients by warming them carefully and stirring thoroughly. Apply the grease when it is warm, but never hotter than the hand can bear.

The edge of the sole and the welt must be greased thoroughly. A convenient way of applying grease to the soles is to melt the grease in a shallow pan, such as a pie pan, and to let the shoes stand in it for approximately a quarter of an hour. Rubber heels should be kept out of the grease by putting the heels outside the rim of the pan. If any grease does get on the heel, take care to remove all traces of it at once.

A good method of prolonging the wear of street shoes is to varnish the soles every two or three weeks with thinned spar varnish (the type of varnish recommended for outdoor or boat use) or with Wipe-On varnish. Wipe-On varnish, based on a Bakelite resin, is obtainable in bottles at 5- and 10-cent stores. (Write Wipe-On Corp., 105 Hudson St., N.Y.C., if necessary to locate a near-by source of supply.) The spar varnish can be bought at hardware and paint stores.

Leather shoe polish usually consists of a mixture of waxes, softened with turpentine, and colored. Floor wax is very much the same sort of substance except that, as a rule, it does not contain dyes; it can therefore be used as a low-cost substitute for shoe polish. To be free from danger of harming the leather, any shoe polish or dressing should be chemically neutral. Its neutrality can usually be tested with red and blue litmus papers. For the test, a small sample of the polish may be stirred with half a cup of warm distilled water or rain water and allowed to settle.

Then the red and blue litmus papers are immersed in the water. If the polish is acid the blue paper will turn red; if alkaline, the red paper will turn blue; if the polish is neutral, both papers will remain practically unchanged in color.

The best way to clean leather is simply by wiping the surface with a damp cloth that is well lathered with a good quality of soap (e.g., saddle soap, toilet soap, shaving soap). In order to avoid as much as possible wetting the leather, only a minimum amount of water should be used in making up the lather.

Since being kept dry is so important for the life of shoes that have not been waterproofed or greased, persons whose feet perspire considerably should wear different shoes on successive days whenever possible, thus allowing time for drying between wearings.

Moist or damp leather will grow molds. Mold growth is inhibited by keeping leather articles in a dry, well-ventilated, well-lighted place. In general, molds do not seriously damage leather, though they may affect its color or appearance. Mildew is easily removed from leather by use of a damp cloth.

Caring for leather is easy and will pay good dividends in the increased amount of service which it gives. For the most part, the problem is one of protecting the leather from harmful wear and abrasion, and above all keeping it out of contact with substances, including water, that are capable of affecting it chemically. Thus to keep leather clean and dry is a major element in good care; keeping it soft helps to prevent cracking and damage associated with loss of flexibility.

Time to Save Gasoline

WITH GASOLINE rationing expected in the near future, the consumer will do well to give thought to all possible means for making a little gasoline go a long way. Two practical suggestions for saving the precious "gas" follow:

It is not an economical habit to tell the attendant at the gas station to "fill her up." Very often when this is done the tank will be filled too full and some gasoline will be wasted later by sloshing out of the filler pipe onto the ground. Yet, if conditions permit one should keep the tank filled to within a gallon or so of its capacity, by adding five gallons whenever there is sufficient space for this amount. The advantage in keeping the

tank nearly full derives from a reduction in "breathing" losses. As temperature and barometric pressure fluctuate air passes slowly in and out of the tank through a vent. The air which passes out of the tank, being saturated with gasoline vapor, wastes gasoline to the atmosphere. The "breathing" of the tank is reduced by keeping the level of the gasoline in the tank high.

Gasoline can be saved by parking the automobile in the shade, because the tank will be kept cooler and evaporation of the gasoline will, therefore, be diminished. This is especially true with older cars having gasoline tanks exposed in some measure to the direct rays of the sun.

Consumers' Research Bulletin

Too Great Complexity Exacts Its Price

Consumers have too often assumed that the most complex appliances and services will always, and under all conditions, be made somehow to go on functioning—if only one is willing to pay a fee to some sort of specialist or serviceman to come and work on the problem. The exigencies of the defense program may have one valuable result in getting people's feet back closer to the ground and teaching them how to make provisions so that life can continue in comfort or at least in safety even if electricity or gas or delivery services should be cut off for a few hours. Howard Vincent O'Brien sees the weakness of the too-soft consumer dependent upon a host of complex appliances and equipment and living in high-geared, super-modernized American homes:

I went home to find that with the thermometer at 20 degrees below zero, the gas supply had failed!... My grandfather would never have found himself in such a plight. His Vermont home was a simple affair. When it got cold, he merely chopped some more logs for the baseburner stove. His horse never froze, nor was his buggy ever stuck in the snow.

He had much less in the way of convenience than we have; but he had much more security. In wrapping ourselves around with pipes and wires we seem to have increased the likelihood of our being strangled. The push-button hasn't freed us: it has put us in bondage.

A symbol of contemporary life is the brandnew house I visited the other day. In the living room is a fireplace. But this is a dummy: it has no flue. The heat (one hopes) is provided by a gas furnace, thermostatically controlled. The temperature—if any—is always as desired. There is no dust, no noise, no ashes. It is wonderful as long as there is gas.

Our primitive ancestors never knew such luxury. On the other hand, they never knew what it was to have a house without heat—except, perhaps, when Indians burned them out.

The Winnetka episode taught a needed lesson. It gave no black eye to heating with gas—which remains an ideal method. What it did was to underscore the old warning about putting all your eggs in one basket.

There is nothing contrived by man which will not break down at one time or another—usually at the time most inconvenient. This being so, the smart thing is to hedge. Heat with gas—by all means: but keep a stove ready for emergencies. Light with electricity; but don't throw away candles and oil lamps. Have all the modern conveniences you can afford—but don't get too far off your primitive base. When a social system gets so complex that it can't, at need, revert to simplicity, it is in danger of extinction.

—Reprinted from The Chicago Daily News. Howard Vincent O'Brien's column "All Things Considered," January 14, 1942, by kind permission of the Author and The Chicago Daily News.

AVING IN MIND that perhaps only a relatively small number of people care whether the Annual Cumulative Bulletin fits a ring binder or not, we are planning the issuance of the 1942 Annual Cumulative Bulletin without the five punched holes that have been used in the past. This would be one of many measures taken to avoid increase in the cost of the yearly subscription, in the face of numerous rises in the cost of materials and services necessary to CR's operation. (The ACB, though without punched holes, will fit the binders which use the simple device of straight wires, mentioned in col. 161-162 of the 1941 ACB.)

We shall be glad to hear from subscribers about this matter. If you feel strongly one way or the other, please send us a post card letting us have your views, for we desire, of course, to meet the expressed needs of the majority of those using CR BULLETINS.

Consumers' Outlook

BECAUSE FACTORIES have shifted from peacetime production and because this has brought temporary loss of work to many, a false impression has taken root in the popular mind. It is the belief of innumerable persons that most consumer goods will be made either not at all or in small quantities; that even necessaries will become scarce, and will mount high in price. A sound refutation appears in the February bulletin of the National City Bank, and is as follows:

Production of most non-durable goods of every-day use, including manufactured foods, shoes and textiles as a whole, will be at high levels, even after deducting Army and lend-lease needs. It will be necessary to maintain and expand railroad and utility equipment, private industrial plant, and to a considerable extent farm machinery, all of which are essential in carrying out the war effort and therefore are indirectly for war use. Hence the bulk of the curtailment will fall on consumers' durable goods. These trends have been clearly established for several months.

A great deal of merchandise will, as the bank declares, be made in increasing quantities because it contributes indirectly to prosecution of the war. Employment is higher than it was two years ago, earnings of most employees are rising. Many necessaries and certain luxuries should have a better market this year than at any time since 1930. Against the effect of high taxes and the sales of defense bonds may be set reduced expenditures in most families for the use of automobiles and for household equipment not obtainable because of diversion of metals to war goods.

—An editorial article in The Sun (New York City), February 9, 1942. Reprinted by special permission of the Editor of The Sun.



CONSUMERS' DIGEST

In the Groove

With Ratings of Phonograph Records

WALTER F. GRUENINGER

Here is a group of instrumental records I use for acoustical tests of phonographs. I make no claim for the musical value of these records, merely for their fidelity, which I highly recommend. You may wish to use them in testing your own phonograph, your friends' phonographs, any phonograph you expect to buy.

For a symphony orchestra take Carmen Suite on Columbia X144. Side one gives you the thwack of the drum to test your low frequency response and the brilliance of a tardy tambourine for your high frequencies. The recording, over all, is extraordinarily smooth. Sones Mariachi on Columbia 70332 offers a gay Mexican number which employs guitars, harps, and percussion instrumentsstrong bass, lots of highs. El Salon Mexico on Victor M546 presents a brilliant Boston Symphony Orchestra recording which reveals the range of a phonograph, too. Capriccio Italien on Victor M632-side 4 particularly goes all out for volume and highs. Pink Elephants, Victor 27662, offers several interesting percussion effects.

A test for high frequencies is Pitos Y Taconeos, Decca 23230, with its finger snapping and heel dance. For a test of trumpet fidelity, I suggest the jazz masterwork, Columbia 36004, which offers a modern arrangement of Carnival of Venice. Columbia 35436 gives us a clear recording of an accordion traditional Swiss Folk Dances. For saxophone fidelity try The Old Stamping Ground, Decca 4204, recorded in 1937. For a clarinet, try Blue Murder, Decca 3863. For violin and viola there's Mozart's Duo No. 2 on Victor M831. For cello, certainly Reger's unaccompanied Suite in G Major, Columbia X152. For pianos, Rachmaninoff's Suite No. 2 for two pianos, Victor M822, is first rate.

(Editor's Note: A number of subscribers have inquired where they may obtain Musicraft Records. They may be ordered through

any local dealer or direct from Musicraft Records, Inc., 242 West 55 St., New York City.)

Ratings of Phonograph Records

Key: AA—highly recommended; A—recommended	mended;	B—inte	rmediate:
C-not recommended	Quality	pre-	Fidelity of Recording
ORCHESTRA	31 18316	tution	Keemasaj
Bach: Arioso. NBC Symph. Orch. under Stokowski. 2 sides, Victor 18498. \$1.	AA	В,	A
Berlioz: Symphonie Fantastique. Cleveland Orch. under Rodzinski. 12 sides, Columbia M488. \$6.83. An imaginative though not definitive performance of a programmatic symphony. Best Fantastique on records.	A	A	A
Brahms: Symphony No. 1. NBC Symph. Orch. under Toscanini. 10 sides, Victor M875. \$5.50. A dramatic interpretation of a great symphony. First choice of this work.	AA	AA	A
Brahms: Symphony No. 2. London Phil. Orch. under Weingartner. 10 sides, Columbia M493. \$5.78. A masterwork noted for its lyricism. Outstrips slightly the superb Columbia M265.	AA	AA	A
Debussy: Iberia (5 sides) & Berlioz: Hungarian March (1 side). Pittsburgh Symph. Orch. under Reiner. Columbia M491. \$3.68. Spain through the music of a French impressionist. Third recorded performance, none of which completely satisfies.	A	A	A
Drigo: Serenade & Fibich: Poeme. Kostelanetz & His Orch. 2 sides,	A	A	A
Columbia 7394. \$1.05. Dvorak: Symphony No. 1. Czech Phil. Orch. under Talich. 10 sides, Victor M874. \$5.50. Joyous, rarely played Bohemian symphony.	В	AA	В
phony. Liszt: Mefisto Waltz (3 sides) & Rimsky-Korsakov: The Battle of Kershenetz (1 side). Boston Symph. Orch. under Koussevitzky. Victor M 870. \$2.50. Liszt's lively score describes a scene from Faust.	A	AA	AA
Schubert: Symphony No. 8 (Un- finished). All American Orch. under Stokowski. 6 sides, Co- lumbia M485. \$3.68. Stokow-	AA	В	В

ski mannerisms and mediocre recording. Best played on Columbia

M330 at \$3.68 but Victor G9 at

\$2.50 is a close runner up.

Rechron Concerts for Fields (Columbia M500, \$3.78. An outstanding masterpiece. The fidelity of this set tops all its competitive for the fidelity of this set tops all its competitive for the fidelity of this set tops all its competitive for the fidelity of this set tops all its competitive for fidelity. The fidelity of this set tops all its competitive for fidelity for the fidelity of this set tops all its competitive for fidelity. The fidelity of this set tops all its competitive for fidelity for the fidelity of this set tops all its competitive for fidelity for fidelit		of	pre-	Fidelity of Recording		of	pre-	Fidelity of Recording
Golumbia M500, \$3.78. A nour standing masterpiece. The fidely state that the senditiveness of Giese through the senditiveness of Giese and Giese an		AA	Α	AA	VOCAL		1011011	
itors. The orchestra is superb. Serkin's precise performance lacks the mellow grandeur of Schnabel's and the semsitiveness of General Characteristic Common	peror). Serkin (piano). 10 sides, Columbia M500. \$5.78. An out- standing masterpiece. The fidel-				Brahms: Serenade & Cradle Song. Lehmann (soprano). 2 sides, Co-	Α	AA	Α
king's butsurpasses Moiseivitch's. Chausson: Concerto for Violin, Piano & String Quartet. Heiletz, Sanroma, Musical Art Quartet. Sanroma, Musical Art Quartet. Sanroma, Musical Art Quartet. Society of the Musica	itors. The orchestra is superb. Serkin's precise performance lacks the mellow grandeur of Schnabel's				Gounod: Romeo & Juliet—Waltz Song & Massenet: Manon—Ga- votte. Sayao (soprano). 2 sides,	A	A	AA
8 sides, Victor M877, \$4.50. A wistful melancholy perveades this fine work fully revealing Chausson's style which is akin to Franck's. CHAMBER & INSTRUMENTAL Beethoven: Quartel No. 16 (Op. 145). Butpass Quarter 6. sides, finitive performance of a well-known quartet. Beethoven's last complete work. Beethoven: Sonala No. 3. Heifetz (violin), Bay (piano). 2 sides, Victor M852, \$3. Unimmelance of the sides, Victor M853, \$3. Unimmelance of the sides, Victor M854, \$3. So. Early Beethoven: Romala No. 1. Casals (Cello), Horszowski (piano). 6 sides, Victor M854, \$3.50. Early Beethoven; tedious listenia, Cello, Horszowski (piano). 6 sides, Victor M858, \$3.50. For advanced listeners. Beethoven: Sonala No. 2. Heifetz (violin), Bay (piano). 5 sides, Victor M858, \$3.50. A melodivalue—violin of the sides, Victor M859, \$3.50. A melodiva	king's but surpasses Moiseivitch's. Chausson: Concerto for Violin, Piano & String Quartet. Heifetz,	AA	AA	AA	Mozart: Marriage of Figaro—Voi Che Sapete & Non So Piu. Stevens (mezzo-soprano). 2 sides, Colum-	AA	A	В
Beethoven: Quartet No. 16 (Op. 133) Budgaest Quartet 6 sides. Columbia M489, \$3.68. A definitive performance of a well-known quartet. Beethoven's last complete work. Beethoven: Sonala No. 3. Height of the potential of the property of the potential of the poten	8 sides, Victor M877. \$4.50. A wistful melancholy pervades this fine work fully revealing Chausson's style which is akin to Franck's.				Puccini: La Boheme—Che Gelida Manina & Meyerbeer: L'Afri- cana—O Paradiso. Martini (ten- or). 2 sides, Columbia 71343.	A	Α	AA
135). Budapest Quartet. 6 sides. Columbia M499, 34.68. A definitive performance of a well-known quartet. Beethoven's last complete work. Beethoven: Sonata No. 3. Heifetz (violin), Bay (piano). 2 sides, Victor M852. St. Unimportant Beethoven, tedious listening. Beethoven: Sonata No. 26 (Les Adies Victor M843. \$3.50. Early Beethoven, tedious listening. Beethoven: Rubinstein (piano). 4 sides, Victor M843. \$3.50. Early Beethoven, tedious listening. Beethoven: Rubinstein (piano). 4 sides, Victor M858. \$2.50. For advanced listeners. Brahms: Sonata No. 2. Heifetz (violin), Bay (piano). 5 sides. Victor M856. \$3. A dashing performance of a pouplar, lyric. introspective work. Top over-all conductor of a popular, lyric. introspective work. Top over-all conductor of a pouplar, lyric. introspective work. Top over-all conductor of a pouplar, lyric. introspective work. Top over-all conductor of a pouplar, lyric. introspective work. Top over-all conductor of a pouplar, lyric. introspective work. Top over-all conductor of a pouplar, lyric. introspective work. Top over-all conductor of a pouplar, lyric. introspective work in the foliation of the soul." Highly recommended tonoviceandexperiencedistieners. Faure: Sonata No. 1. Elman (violin). Bay (piano). 8 sides, Victor M850, \$3.50. An melodition of the soul." Highly recommended tonoviceandexperiencedistieners. Faure: Sonata No. 2. Heifetz's suppleness on Victor M858. \$4.50. Vol. 1. 6 sides. Victor M859, \$3.50. A melodition of the soul." Highly recommended tonoviceandexperiencedistieners. Faure: Sonata No. 2. Heifetz's suppleness on Victor M858 on the better recording. Blanca plate the better recording plate that a linean's large plate of the soul." Highly recommended tonoviceandexperiencedistieners. Moussorgsky: Pictures at an Exhibition. Braidewsky (piano). 8 sides, Victor M850, \$4.50. Braidewsky (piano). 8 sides, Victor M850, \$4.50. Braidewsky (piano). 8 sides (Victor		ΛΛ	ΑΑ	Δ.	LIGHT, FOLK, SPIRITUALS, MISCELLAI	NEOUS		
fetz (violin), Bay (piano). 2 sides, Victor M852, \$3. Unimportant Beethoven. Beethoven. Sonata No. 1. Casals (cello), Horszowski (piano). 6 sides, Victor M854, \$5.00. Early Beethoven, tedious listening. Beethoven: Sonata No. 2.6 (Les Adieux). Rubinstein (piano). 4 sides, Victor M858, \$2.50. For advanced listeners. Brahms: Sonata No. 2. Heifetz (violia), Bay (piano). 5 sides, Victor M850, \$3. A dashing performance of a popular, lyric. victor M850, \$3. A dashing performance of a popular, lyric. victor M850, \$3. A dashing performance of a popular, lyric. victor M850, \$3. O. Vol. 2. Expressively performed "dances for the sout." Highly recommended tonoviceand experienced listeners. Faure: Sonata No. 1. Elman (violin), Mittmann (piano). 6 sides, Victor M859, \$3.50. A melodious French work which foreshadous Franch work which foreshadous French work which foreshadous French work which foreshadous French work which foreshadous Franch work which foreshadous French work which foreshadous Fre	135). Budapest Quartet. 6 sides, Columbia M489. \$3.68. A de- finitive performance of a well- known quartet. Beethoven's last complete work.				ginny & Other Minstrel Songs. King's Men, Cruise, Jackson (singers). 10 sides, Decca Album 281. \$3. The "Negro Stephen Fos-	Α	A	Α
Reethoven: Sonata No. 1. Casals (cello), Horszowski (piano). 6 sides, Victor M843. \$3.50. Early Beethoven: tedious listening. Beethoven: Sonata No. 26 (Les Adiews). Rubinstein (piano). 4 sides, Victor M858. \$2.50. For advanced listeners. Brahms: Sonata No. 2. Heifetz (violia), Bay (piano). 5 sides. Victor M856. \$3. A dashing performance of a popular, lyric. introspective work. Top over-all value—Victor 8359(6) (\$2). Chopin: Waltes. Vol. 1 & 2. Brailowsky (piano). 8 sides, Victor M856, \$3.50. A melodious French work which foreshadous Fren	fetz (violin), Bay (piano). 2 sides, Victor M852. \$3. Unim-	В	В	В	ing Carry Me Back, In the Evening, Golden Slippers, Gabriel's			
Recthoven: Sonala No. 26 (Les Ade Moise, Victor M858, \$2.50. For advanced listeners. Brahma: Sonala No. 2. Heifetz (violia), Bay (piano). 5 sides, Victor M856, \$3. A dashing performance of a popular, lyric, introspective work. Top over-all value—Victor 8359.6 \$3. A dashing performance of a popular, lyric, introspective work. Top over-all value—Victor 8359.6 \$3. A dashing performance of a popular, lyric, introspective work. Top over-all value—Victor 8359.6 \$3. A dashing value—Victor 8363.8 \$4.50. Vol. 1. 6 sides, Victor M864, \$3.50. Vol. 2. Expressively performed "dances for the soul." Higbly recommended tonoviceand experienced listeners. Saurer Sonala No. 1. Elman (violin), Mittmann (piano). 6 sides, Victor M859, \$3.50. A melodious French work which foreshadous French work	Beethoven: Sonata No. 1. Casals (cello), Horszowski (piano). 6 sides, Victor M843. \$3.50. Early	С	AA	В	Kern: Showboat. Cleveland Orch. under Rodzinski. 6 sides, Colum- bia M495. \$3.68. Inflated med-	A.	AA	Α.
Brahms: Sonata No. 2. Heifetz (violia), Bay (piano). 5 sides. Victor M856. \$3. A dashing performance of a popular, lyric. Introspective work. Top over-all value—Victor 8359/66 (\$2). Chopin: Waltzes. Vol. 1. & 2. Brailowsky (piano). 8 sides, Victor M861, \$3.50, Vol. 2. Expressively performed "dances for the soul." Highly recommended tonoviceand experienced listeners. Faure: Sonata No. 1. Elman (violin), Mittmann (piano). 6 sides, Victor M859. \$3.50. A melodious French work which foreshadows Franck's Sonata. Heifetz's suppleness on Victor M328 comes closer to my ideal than Elman's lushness. Elman gets the better recording. Brailowsky (piano). 8 sides, Victor M861. \$4.50. Brilliant performance of music describing pictures in a gallery. Generally preferred in a colorful orchestral arrangement. Frequent buzzes were heard during loud passages, on two high-fidelity sets. Less evident but still present were the buzzes on a \$25 table model. Mozart: Sonatas No. 5 & 17. Arrau (piano). 6 sides Victor M842. \$3.50. The superb Sonata 17 appears on 3 sides of V 18280/1 (separately, \$2.). Overall, best recording of both. Oyanguren: Flamenco Suite. Oyanguren (guitar). 2 sides, Vice	Beethoven: Sonata No. 26 (Les Adieux). Rubinstein (piano). 4 sides, Victor M858. \$2.50. For	Α	AA	A	symphony orchestra. Neverthe- less, thousands will enjoy it.	D	Δ	4
introspective work. Top over-all value—Victor 8359/60 (\$2). Chopin: Waltzes. Vol. 1 & 2. Brailowsky (piano). 8 sides, Victor M863, \$4.50, Vol. 1. 6 sides, Victor M863, \$4.50, Vol. 2. Expressively performed "dances for the soul." Highly recommended tonovicean dexperienced listeners. Faure: Somata No. 1. Elman (violin), Mittmann (piano). 6 sides, Victor M859. \$3.50. A melodious French work which foreshadous Franck's Sonata Heifetz's suppleness on Victor M328 comes closer to my ideal than Elman's lushness. Elman gets the better recording. Moussorgsky: Pictures at an Exhibition. Brailowsky (piano). 8 sides, Victor M361, \$4.50. Brilliant performance of music describing pictures in a gallery, Generally preferred in a colorful orchestral arrangement. Frequent buzzes were heard during loud passages, on two high-fidelity sets. Less evident but still present were the buzzes on a \$25 table model. Mozart: Sonatas No. 5 & 17. Arrau (piano). 6 sides, Victor M842. \$3.50. The superb Sonata 17 appears on 3 sides of V 18280/1 (separately, \$2). Overall, best recording of both. Oyanguren: Flamenco Suite. Oyanguren (guitar). 2 sides, Victor M842. \$3.50. Play Fiddle Play, Zigeuner, Ro-	Brahms: Sonata No. 2. Heifetz (violia), Bay (piano). 5 sides. Victor M856. \$3. A dashing	A	AA	A	Men. 10 sides, Decca Album 246. \$2.25. Anthology of previ- ously issued foxtrots featuring 9	D		A
Brailowsky (piano). 8 sides, Victor M863, \$4.50, Vol. 1. 6 sides, Victor M870, \$3.50, Vol. 2. Expressively performed "dances for the soul." Highly recommended tonovice and experience dlisteners. **Faure: Sonata No. 1. Elman (violin), Mittmann (piano). 6 sides, Victor M850, \$3.50, A melodious French work which foreshadows Franck's Sonata. Heifetz's suppleness on Victor M328 comes closer to my ideal than Elman's lushness. Elman gets the better recording. **Moussorgsky: Pictures at an Exhibition. Brailowsky (piano). 8 sides, Victor M861. \$4.50. Brilliant performance of music describing pictures in a gallery. Generally preferred in a colorful orchestral arrangement. Frequent buzzes were heard during loud passages, on two high-fidelity sets. Less evident but still present were the buzzes on a \$25 table model. **Mozart: Sonatas No. 5 & 17. Arrau (piano). 6 sides, Victor M842. \$3.50. The superb Sonata I7 appears on 3 sides of V 18280/1 (separately, \$2). Overall, best recording of both. **Oyanguren: Flamenco Suite. Odd Pamily Album. Hannon (tenor). 8 sides, Decca Album 260. \$2.75. One must see Carmen Amaya to appreciate these wild numbers fully. **Forward March. Goldman Band. 8 sides, Columbia C86. \$2.79. Principally popular marches. **Mexican Cowboy Songs. Los Rancheros (vocal trio). 10 sides, Decca Album 276. \$3. These Mexicans are the real thing. If you want only two discs get D18209 (50c) which offers Sones Veracrusanos & La Malagueno and D10469 (35c) which offers two of the best numbers in this album on an earlier, cheaper coupling—El Toro and Cieblo Lindo. **Native Brasilian Music. 5 Brazilian Vocal & Inst. Groups. 8 sides, Columbia C83. \$2.62. Authentic folk & popular music. **Old Family Album. Hannon (tenor). 8 sides, Decca Album 261. \$1.90. Long Long Ago, Juanita, Old Oaken Bucket, Ben Boll, etc., with organ. Straight interpretations likely to please a wide audience. **Play Fiddle Play. Lorand (violin). B AA A SAA A SA	introspective work. Top over-all value—Victor 8359/60 (\$2).	3 A	3 A	Λ	Calypsos Vol. 3. 5 singers. 10 sides, Decca Album 256. \$3.	С	A	A
tonovice and experience disteners. Faure: Sonata No. I. Elman (violin), Mittmann (piano). 6 sides, Victor M859 \$3.50. A melodious French work which foreshadows Franck's Sonata. Heifetz's suppleness on Victor M328 comes closer to my ideal than Elman's lushness. Elman gets the better recording. Moussorgsky: Pictures at an Exhibition. Brailowsky (piano). 8 sides, Victor M861. \$4.50. Brilliant performance of music describing pictures in a gallery. Generally preferred in a colorful orchestral arrangement. Frequent buzzes were heard during loud passages, on two high-fidelity sets. Less evident but still present were the buzzes on a \$25 table model. Mozart: Sonatas No. 5 & 17. Arrau (piano). 6 sides, Victor M842. \$3.50. The superb Sonata 17 appears on 3 sides of V 18280/1 (separately, \$2). Overall, best recording of both. Oyanguren: Flamenco Suite. Oyanguren (guitar). 2 sides, Victor M862. \$4.50. Brillary fiddle Play. Zigeuner, Ro-	Brailowsky (piano). 8 sides, Victor M863, \$4.50, Vol. 1. 6 sides, Victor M864, \$3.50, Vol. 2. Expressively performed "dances for	aa	AA	A	Flamencan Songs & Dances. Amaya. 6 sides, Decca Album 269. \$2.75. One must see Carmen Amaya to appreciate these wild numbers	С	AA	AA
Victor M859. \$3.50. A melodious French work which foreshadows Franck's Sonala. Heifetz's suppleness on Victor M328 comes closer to my ideal than Elman's lushness. Elman gets the better recording. Moussorgsky: Pictures at an Exhibition. Brailowsky (piano). 8 sides, Victor M861. \$4.50. Brilliant performance of music describing pictures in a gallery. Generally preferred in a colorful orchestral arrangement. Frequent buzzes were heard during loud passages, on two high-fidelity sets. Less evident but still present were the buzzes on a \$25 table model. Mozart: Sonalas No. 5 & 17. Arrau (piano). 6 sides, Victor M842. \$3.50. The superb Sonala 17 appears on 3 sides of V 18280/1 (separately, \$2). Overall, best recording of both. Oyanguren: Flamenco Suite. Oyanguren (guitar). 2 sides, Victor M842. Sonaguren (guitar). 2 sides	Faure: Sonata No. 1. Elman (vio-	AA	В	AA -	sides, Columbia C86. \$2.79. Prin-	Α.	<i>A</i> .	А
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chestral arrangement. Frequent buzzes were heard during loud passages, on two high-fidelity sets. Less evident but still present were the buzzes on a \$25 table model. Mozart: Sonatas No. 5 & 17. Arrau (piano). 6 sides, Victor M842. \$3.50. The superb Sonata 17 appears on 3 sides of V 18280/1 (separately, \$2). Overall, best recording of both. Oyanguren: Flamenco Suite. B AA A	hibition. Brailowsky (piano). 8 sides, Victor M861. \$4.50. Bril- liant performance of music de- scribing pictures in a gallery. Gen-	A	AA	В	and D10469 (35c) which offers two of the best numbers in this album on an earlier, cheaper coupling—El Toro and Cielito Lindo.			
Mozart: Sonatas No. 5 & 17. Arrau (piano). 6 sides, Victor M842. \$3.50. The superb Sonata 17 appears on 3 sides of V 18280/1 (separately, \$2). Overall, best recording of both. Oyanguren: Flamenco Suite. B AA AA 8 sides, Decca Album 267. \$1.90. Long Long Ago, Juanita, Old Oaken Bucket, Ben Bolt, etc., with organ. Straight interpretations likely to please a wide audience. Play Fiddle Play. Lorand (violin). 8 sides, Decca Album 266. \$2.50. Oyanguren (guitar). 2 sides, Vic-	chestral arrangement. Frequent buzzes were heard during loud passages, on two high-fidelity sets. Less evident but still present were				Vocal & Inst. Groups. 8 sides, Columbia C83. \$2.62. Authen- tic folk & popular music.			
Oyanguren: Flamenco Suite. B AA AA 8 sides, Decca Album 266. \$2.50. Oyanguren (guitar). 2 sides, Vic- Play Fiddle Play. Zigeuner, Ro-	Mozart: Sonatas No. 5 & 17. Arrau (piano). 6 sides, Victor M842. \$3.50. The superb Sonata 17 appears on 3 sides of V 18280/1 (separately, \$2). Overall, best re-	A	AA	AA	8 sides, Decca Album 267. \$1.90. Long Long Ago, Juanita, Old Oaken Bucket, Ben Bolt, etc., with organ. Straight interpretations likely to please a wide audience.			
	Oyanguren: Flamenco Suite. Oyanguren (guitar). 2 sides, Vic-	В	A.A.	AA	8 sides, Decca Album 266. \$2.50. Play Fiddle Play, Zigeuner, Ro-	В	AA	Λ

Ratings of Motion Pictures

A B C

This department of Consumers' DI-GEST endeavors to supply the critical consumer with a digest of opinion from a number of reviews, ranging from the motion picture trade press to Parents' Magazine which rates motion pictures not only on their quality as entertainment, but on their suitability in various aspects for children.

It should be emphasized that the motion picture ratings which follow do not represent the judgment of a single person but are based on an analysis of the reviews appearing in some 21 different periodicals. (For example, "Reap the Wild Wind" was recommended by 1 reviewer, rated intermediate by 8, and not recommended by 1.) The sources of the reviews are:

America, Baltimore Sun, Box Office, The Christian Century, The Exhibitor, Harrison's Reports, Liberty, Mademoiselle, Motion Picture Herald, Motion Picture Reviews (The Women's University Club of Los Angeles), National Legion of Decency List, Newsweek, New York Herald Tribune, New York Sun, New York Times, New York World-Telegram, Parents' Magasine Releases of the D.A.R. Preview Committee, Successful Farming, Time, and Variety (daily).

Periodicals will be added to this list from time to time as future exploration of the subject brings to light other journals offering critical appraisals of motion pictures which appear to be deserving of the intelligent reader's consideration.

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), and C (not recommended).

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

	Des	scrip	otive abbreviations are as follows
biog car- com cri- doc- dr- fan-	-docu -dram -fant -four	graph oon nedy e and ument a asy	mus—musical mys—mystery nor—dramatization of a novel apture of criminals rom—romance
A	В	C	
-	9	6	Adventures of Martin Eden, The
2	12	2	All Through the Night war-mel A
	5	1	Almost Married
	6	2	Always in My Heart mus-de AVA

Among the Living . .

6 8

6

Always in My Heart mus-dr AYC

Arizona Terrors wes AYC

Appointment for Love

A	B	C	
2	13	3	Babes on Broadwaymus-com AYC
	4	15	Bahama Passagedr A
1	18	1	Ball of Fire
_	3	4	Rashful Rachelor The com AVC
	7	6	Bedtime Story
	3	2	Below the Border wes AYC
1		4	
	18	-	Birth of the Bluesmus-com AY
-	1	5	Black Dragonswar-mel A
-	-	3	Blonde Comet, The mel AYC
_	6	2	Blondie Goes to Collegecom AYC
-	9	2	Blue, White, and Perfect mys A
	5	5	Body Disappears, The Com A
	9	3	Bombay Clipperwar-mel AYC
	8	6	Born to Singmus-com AYC
(recen	5	1	Borrowed Hero
_	6	_	Broadway Big Shot
-	6	2	Brooklyn Orchid
_	12	4	Bugle Sounds, Thewar-mel AY
	1	4	Bullet Scars
	+	*	
_			Bullets for Bandits mus-wes AYC
-	3	-	Butch Minds the Baby A
	2	2	Cadets on Parade mel AYC
	. 3	2	
-	+	6	Call Out the Marines war-mus-com A
-	2	4	Canal Zonewar-mel AYC
3	10	3	Captains of the Cloudswar-dr A
_	3	7	Castle in the Desert mys AYC
-	5	1	Close Call for
			Ellery Queen, Amys AY
-	4	1	Code of the Outlaw wes AYC
	3	2	Come On, Danger mus-wes AY
_	6	5	Confessions of
	0	J	Boston Blackie mys A
_	10	5	Confirm or Dony
	17	3	Consider Prothers The
			Confirm or Denywar-mel A Corsican Brothers, Thenov AY Courtship of Andy Hardy, The com-dr AYC
1	7	2	Courtship of Andy Hardy, The com-ar Arc
*	4	1	Cowboy Serenademus-wes AYC
-			Dentarrate Then Line was and AVC
-	11	1	Dangerously They Live war-mel AYC
-	6	5	Date with the Falcon, $A \dots mys AY$
1	10	4	Design for Scandal
-	5	1	Devil Pays Off, Thewar-mel A
-	2	5	Don't Get Personal
-	3	1	Double Trouble
_	8	6	Dr. Kildare's Victorydr A
-	1	3	Duke of the Navy
9	11		Dumbocar AYC
-	4	2	Fiestamus-com AY
_	3	_	Fighting Bill Fargomus-wes AYC
_	3	2	Fingers at the Windowcri-mel AYC
	12	3	Fleet's In, The mus-com A
	4	5	Fly by Nightwar-mel A
	3	1	Forbidden Trails wes AYC
	5	4	Four Jacks and a Jill mus-com AY
		4	Four Jacks and a Jill mus-com Ar
-	3		Freckles Comes Home mel AYC
-	+	3	'Frisco Lildr AYC
	4	4	Gentleman After Dark, Acri-mel A
-	12	2	Gentleman at Heart, Acri-com A
	4	2	Ghost of Frankstein, The mel A
_	2	2	Girl Must Live, A mus-com A
	12	_	Glamour Boymus-com AY
	5	4	Go West, Young Lady mus-mes AV
3	4		Go West, Young Lady mus-wes AY Gold Rush, The (re-edited)com AYC
3	3	2	Great Man's Lady, Therom-dr A
	.3	-	Great Mail S Dauy, The
3	15	3	H. M. Pulham, Esq nov AY
	3	3	Harvard, Here I Come
_	5	2	Hay Foot mus-war-com AYC
	1	-	Heart of the Rio Grande mus-wes AYC
	12	2 2 3	Hellzapoppin
	2	.5	Henry and Dizzy
_	3	2	Honolulu Lumus-mel A
11	8	1	How Green Was My Valley nov A

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	A	В	C		A	B	C	
	1	6	_	I Killed That Manmys-mel AY	_	6	_	Riders of the Badlandswes AYC
	2	15	2	I Wake Up Screamingmys-mel A	_	6	4	Right to the Heartcom AYC
-	_	9	8	International Squadronwar-mel AY	_	2	4	Rings on Her Fingers
	4	11	1	Invaders, Thewar-dr AYC	_	4	1	Rio Rita
								(Abbott & Costello) war-mus-com A
-	-	6	3	Jail House Bluesmus-com A		12	3	Rise and Shine
	1	14	2	Joan of Pariswar-mel A	_	8	4	Road to Happinessmus-dr A
	1	14	_	Joe Smith, American war-dr AY	_	12	2	Rodeo Rhythmmus-com AYC
-	_	10	7	Johnny Eager	_	-	8	Roxie Hart
-	-	2	4	Juke Box Jenniemus-com AY	_	4	_	Royal Mounted Patrol, Thedr AY
	2	2	5	Jungle Book, Thefan AYC		-		0.1
		4	_	Kid Glove Killercri-mel AYC	_	5	1	Salute to Couragewar-mel A
-	1	10	5	Kings Rowdr A	_	3 5	1 2	Scattergood Rides High com AYC
		5	_	Klondike Fury mel A	_	5	2	Sealed Lipsmel A Secret Agent of Japanwar-mel AY
				200000000000000000000000000000000000000	_	3	3	Secrets of the Lone Wolf
_	_	7	2	Laburnum Grovedr AY	_	3	12	Shanghai Gesture, The dr A
-	-	7	5	Lady for a Nightmus-dr A.	_	2	4	Shut My Big Mouth
-	_	10	6	Lady Has Plans, Thewar-com A	_	3	4	Sing for Your Suppercom AYC
-	-	3	3	Lady in Distress	_	3	5	Sing Your Worries Away mus-com AY
	1	5	4	Lady Is Willing, The	-	4	1	Sleepytime Galmus-com A
-	_	2	3	Larceny, Inc		4	2	Snuffy Smith, Yard Birdcom AYC
-	-	1	2	Law of the Timber	_	14	4	Son of Furynov-mel A
-	_	3	1	Lone Star Rangerwes AYC	_	9	5	Song of the Islandsmus-com AYC
	2	12	3	Louisiana Purchasemus-com A	_	3	3	Sons of the Seahist-dr AY
		2	-	Med Doctor of	-	5	_	South of Santa Femus-wes AYC
-	_	2	7	Mad Doctor of Market Street, The	-	6	4	Steel Against the Sky mel AYC
		9	2	Male Animal, The	_	3	2	Stork Pays Off, The
_	_	6	1	Man from Cheyennemus-wes AY	3	13	5	Sullivan's Travelscom-dr A
		2	5	Man from Headquarterscri-dr AYC		2	3	Sundown Jimwes AYC
	3	16	2	Man Who Came to		8	1	Swing It, Soldiermus-com AY
	0	10	-	Dinner, The				ms
_	_	5	5	Man Who Returned to	1	12	2	They Died with Their
				Life, The				Boots Onhist-mel AYC
-	_	4	1	Man With Two Livescri-mel A	_	5	2	This Gun for Hirecri-war-mel A
_	_	4	2	Mayor of 44th Stmus-mel AY	_	2	3	This Time for Keepscom AYC This Was Pariswar-mel AY
-	-	5	3	Melody Lanemus-com AYC	_	4	_	Thunder River Feud mus-wes AYC
-	-	2	4	Mexican Spitfire at Sea A		4	2	Thundering Hoofsmus-wes AYC
-	_	1	2	Miracle Kid, The	5	9	2	To Be or Not To Be war-com A
-	-	5	2	Miss Polly	_	8	1	To the Shores of Tripoli war-dr AYC
-	-	2	1	Mississippi Gamblercri-mel A	-	1	2	Today I Hang
	3	11	1	Mister Vwar-mel AYC		3	6	Torpedo Boatwar-mel AY
-		3	1	Mokey		5	2	Tragedy at Midnight, Amys A
-	_	11	5	Mr. and Mrs. North mys-com AY	_	1	2	Tramp, Tramp, Trampwar-com AYC
	-	4	4 5	Mr. Bug Goes to Towncar AYC Mr. Wise Guymel AY	-	6	5	Treat 'em Rough war-mel AYC
		6	_	My Favorite Blonde war-com AY	-	3	2	True to the Armymus-com AYC
		0		my ratorite biolise	-	4	2	Tuttles of Tahiti, The
-		5	8	Never Give a Sucker an	_	5	.1	Tuxedo Junction
		-	-	Even Break	1	6	11	Two-Faced Woman
	3	5	6	New Winebiog-rom AYC		4	3	Two Yanks in Trinidad war-com A
-	_	6	2	Niagara Falls			-	** 1 * 1 * 1
-	-	6	6	Night Before the	_	1	2	Underground Rustlerswes AYC
				Divorce, Thedr A	-	6	6	Unexpected Uncle
-	-	10	2	Night of January 16, Themys A	1	11	1	Unfinished Business
-	-	5	3	Nine Bachelors	-	8	8	Unholy Partners
-	-	7	3	No Hands on the Clockmys-nov A		9	A	Valley of the Sunwes AYC
-	-	3	_	North of the Rockies mus-wes AYC	1	10	1	Vanishing Virginian, Thecom-dr AYC
-	-	7	4	North to the Klondike mel AYC	_	3	-	Voice in the Night, Thewar-mel A
		7	2	Obliding Vound Lady		3		Total in the signit, and significant A
		9	3	On the Sunny Sidewar-com AY		4	7	We Were Dancing
9	2	7	_	One Foot in Heaven	_	5	7	Weekend for Three
4	4	,		one root in meaven	_	1	4	West of Cimarron wes AYC
_	_	3	3	Pacific Blackout mel AY		2	1	West of Tombstonemus-wes AYC
_	-	2	1	Panther's Claw, Themus-mys A	_	6	4	What's Cookin'mus-com AYC
-	-	5	2	Pardon My Stripes		_	3	When Knights Were Boldmus-dr A
_	_	4	4	Perfect Snob, The	_	2	3	Who Is Hope Schuyler
_	_	10	3	Playmates mus-com AYC	_	2 5	4	Wild Bill Hickok Rideswes AY
-	-	3	_	Professor Creeps	-	4	9	Wolf Man, Themys AY
				(all negro)	5	12	_	Woman of the Year
-	_	2	4	Public Enemiescri A				
				m word was 1	_	6	6	Yank on the Burma
	1	8	1	Reap the Wild Wind		4		Road, Awar-dr A
	2	9	4	Remarkable Andrew, Thefan-com AYC	_	4	1	Yokel Boy
****	-	1	2	Remarkable Mr. Kipps, Thedr AY	1	8	8	You Belong to Me
	5	10	1	Remember the Dayrom AYC	_	7 5	7	You're in the Army Nowcom AYC
-	-	10	6	Ride 'em Cowboymus-com AYC	_	3	4	Young Americacom AYC